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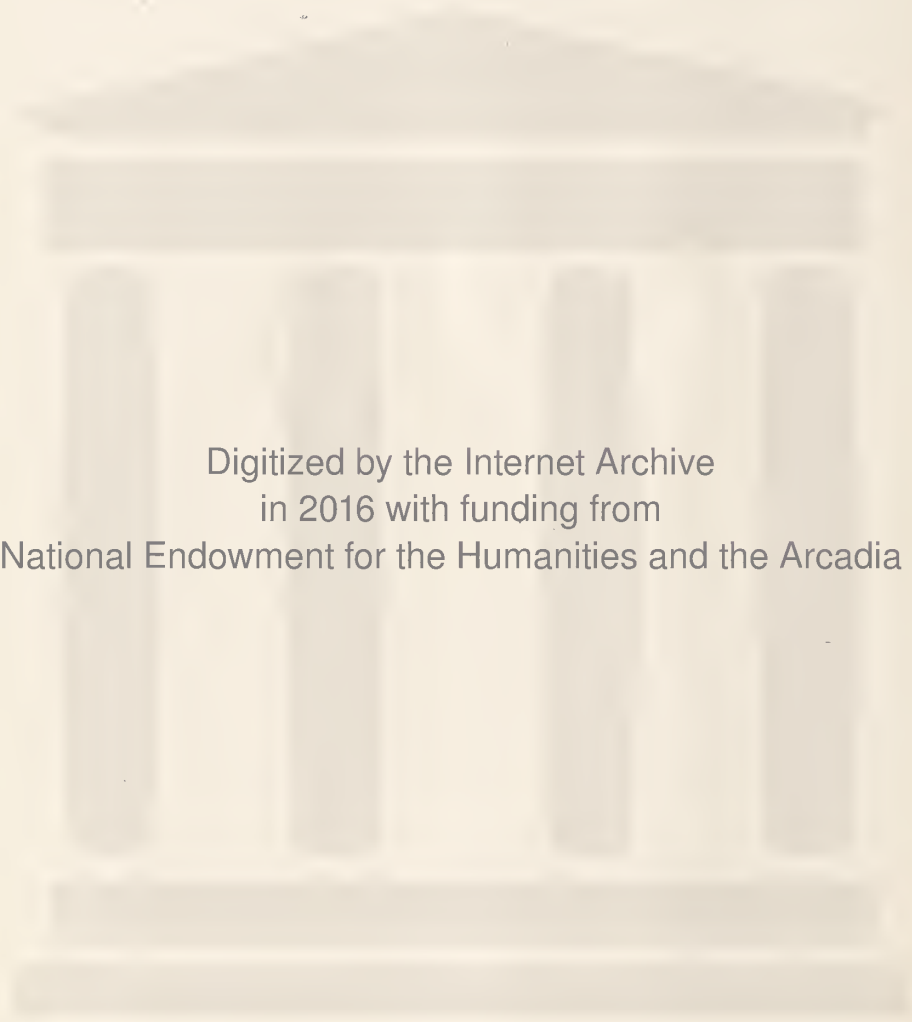

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PRESIDENTIAL ADDRESS

President H. R. Johnson,
Fairmont, W. Va.

Fifty-third Annual Meeting of West Virginia State Medical Association, Parkersburg, May 18-20, 1920.

The purpose of an address of this character should be to deal with problems of importance to the public, in which the medical profession must play the leading part.

With this in mind, I found myself facing an embarrassing situation when I began to think of a topic upon which to discourse worthy of your attention, for I discovered my predecessors had discussed about everything on the calendar; and your scholarly president of last year, in his masterly address, took nearly everything in sight, so that very little remains for me to select from, without being guilty of repetition.

I have, however, addressed my feeble efforts to the task of dealing with one topic, which is, and has been confronting the American public long before anyone within the sound of my voice saw the light of day; a condition and a problem to be solved dating back through many generations, claiming its victims by thousands, yea, hundreds of thousands, whose plea for help has been unheeded, because of erroneous conception entertained by the public, and what is of more vital importance, the medical profession. I refer to the great social, civic and medical problem of drug addiction. America leads the world today in the consumption of narcotic drugs.

Reports of the special narcotic committee, appointed by the secretary of the treasury, to investigate the drug traffic in the United States, reveals an astounding state of affairs: it convincingly shows that we are the largest consumer of drugs of any nation of the world.

This committee is responsible for the information that there are more than one million addicts in the United States.

That sixty-one million dollars are spent annually by drug addicts.

It is further estimated that two hundred and seventy thousand persons are

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receiving treatment to rid themselves of a malady that binds them with "hoops of steel."

The annual consumption of opium has been estimated as 33 grains for each man, woman and child in the United States.

This report further shows that one person in every 100 of our population is an addict. Applying this to our own state, we would have within our borders, over 10,000 within the grasp of this monster.

From this report it must be taken as an established fact, that drug addiction is unduly prevalent throughout the country, that in spite of drastic federal laws to correct it, it is on the increase. That it is not only a grave public question, but one calling for the most earnest and sympathetic investigation, if we are to adopt the most effective means of dealing with the situation.

The narcotic drug situation as it exists in our country today, is due largely to misconception and indifference, on the part of our profession and the lay public, of facts concerning the condition, falsely known as the drug habit, and its victims as "dope fiends," but which is slowly becoming correctly known as narcotic drug addiction disease, and its votaries as addicts.

In discussing this subject, which I feel is one of the greatest and most important confronting the medical profession today, I have endeavored to consider it from the standpoint of the addict, the medical profession and the law.

Dr. Earnest B. Bishop, of New York City, to whom, I think we are largely indebted for the new and right conception of the drug addict, has this to say: "That the term drug habitue or 'drug fiend' has been so generally applied to, and commonly accepted as descriptive of those afflicted with this condition, is conclusive proof of general scientific neglect of it, of past apathy and indifference toward it, and of ignorance concerning it.

"That it is fundamentally a physical disease condition presenting definite and constant clinical symptoms and signs, and invariable and characteristic, physical phenomena and that it has associated with it, and especially with its unskillful handling, some of the most agonizing physical suffering known to humanity."

What is the status of the addict, and what is drug addiction? There are no class distinctions in drug addiction. The condition is found equally as often among the honest, worthy and self-supporting class as it is in the denizens of the underworld. It claims its victims from all walks of life. The judge, the business man and the ladies of polite business man and the ladies of the polite society are more often the victims than are the outcast, beggar or thief.

The law and the public regard the addict as criminal and vicious. The medical profession will tell you the addict is mentally weak, a moral defective and degenerate. While all of these may fit some cases, one thing stands out and admits no controversy; and that is that the addict is always sick. This is one fact that overshadows all others and is common to all addicts, and once addiction is established, the history, without exception, is intense physical suffering, on withdrawal.

To quote Dr. Bishop again, he says: "After addiction is once developed the addict loses whatever euphoric sensation he may have experienced, and all that narcotic administration spells for him is release from suffering.

"Without the drug of his addiction he cannot pursue a social, economic or physical endurable existence.

"He may have been primarily depraved, defective or vicious. His primary administration of the drug may have been deliberate indulgence, idle curiosity, or any combination of underlying conditions, which constitute mental deficiency, or he may have been an upright, honest, intelligent self-supporting citizen, in whom the primary administration was unwise or unavoidable medication, he may have been an innocent purchaser of patent medicine nostrums, containing addiction forming drugs.

"Whatever his original status, mental, moral, physical or ethical, and whatever the circumstances of his primary indulgence, once addiction has been fastened upon him, the vital fact of his history is the same; that the subsequent use of his drug means not pleasure, not vice, not appetite, not habit. It means relief from physical torment."

The fundamental reconstruction of our conception of this condition which must precede any satisfactory solution of its complex problems, must be based upon the proposition that *drug addiction is as distinctly a disease as is pneumonia or typhoid fever. That drug addicts must be regarded and treated as patients suffering from a distinct clinical entity, and are not to be regarded as criminals or degenerates.* I am convinced that a large class of these unfortunates are suffering mental as well as physical torture, realizing the bondage in which they are held while desiring above all else to be helped and cured.

It is an easy shift of responsibility to say that these sufferers may go to institutions and be cured.

This requires means that but few possess, for the treatment will run into months, in fact, I believe these patients are not entirely freed from the demands of the drug for twelve to eighteen months. Please bear this in mind: the withdrawal of the drug does not constitute a cure. They are cured when the desire for the drug no longer exists.

Besides, there are very few ethical institutions to which patients can go at the present time. The semiethical and quack institutions boosting some specific cure or method of treatment often do more harm than good.

What of the medical profession? What is our professional and civic responsibility in working out the solution of this great problem? What has the medical profession done for the addict?

A more or less careful inquiry into this phase of the question has convinced me that very little attention has been given to narcotic addiction as a physical disease demanding clinical study. My investigation, with but one notable exception, shows that the medical profession regards addiction as a vice, based upon mental deficiency and degeneracy, ever seeking for panacea's specific remedies and method of cures, and have not grasped the fundamental fact that it is a distinct physical disease, and that the addict is a sick individual.

The mere taking of the narcotic drug has been the only thing considered, while the causes back of the craving, evidenced by intense physical agony, has received but scant recognition or study. To state it plainly, with no intention of indulging in any but the most friendly criticism, our profession has had neither education nor training in treating narcotic drug addiction disease.

The physician has tried all the various methods and treatments advocated, and

with few exceptions has failed, until discouraged and disgusted has given it up, and admits defeat.

This was the condition of affairs when the federal narcotic law went into effect.

It is quite true that a few high class institutions were doing good work, but they are too expensive for the great mass of addicts, most of whom are in very meager circumstances, and are not financially able to avail themselves of these facilities. These are the ones upon whom the quack institutions prey. The spectacularly proclaimed short duration, with special specific and newly discovered treatments, are eagerly sought by many in humble circumstances, in the *hope of cure.*

An eminent authority makes this statement as to these quack institutions: "It is my opinion however in the light of my experience upon the testimony of many histories, and from conversation with other physicians, that the widespread acceptance of these specific treatments and cures has been a misplaced confidence and an unwise credulity, and a manifested lack of widespread scientific comprehension of the mechanism and clinical appreciation of narcotic drug addiction disease."

What of the law? While I do not wish to be construed as opposing laws to prevent the promiscuous and indiscriminate sale and use of narcotic drugs and the spread of drug addiction, I wish to be understood as heartily in accord with humane and intelligent legislation, to meet and overcome the evil. The enactment of laws, with adequate knowledge of the situation, and of the true nature and cause of drug addiction.

The present narcotic law, while made with the best intentions, is imperfect and I am inclined to think, as it is now enforced, not only fails to improve conditions already existing, but tends to defeat the very object for which it was intended.

Before laws which so intimately concern the mental, moral and physical welfare of such a considerable number of our people can be enacted and successfully operated, the conditions they assume to correct must be well understood.

It would seem that the framers of the present law had in mind but one class of addicts: that class known as the "underworld." No consideration whatever has been given to the effect it would have on hundreds of thousands of upright, innocent addicts; penalizing a condition for which the majority are not responsible, and which they are powerless to overcome.

The fact has been disregarded or not known, that to the addict his drug is as essential as the air he breathes, his demand for it is not for sensuous pleasure, or to gratify a vicious appetite but to relieve him from the indescribable agonies to which its withdrawal gives rise.

In the interest of these unfortunates and in the cause of humanity, I contend that any law depriving the addict of his drug, without making necessary provision for his humane and intelligent treatment, until he can be freed from his bondage, is as brutal and inhuman as any atrocities committed by the Huns.

The conditions embodied in the present law has placed such a handicap on the physician, that he has almost decided to have as little as possible to do with drug addicts or their needs. This places the addict in a precarious position, and from necessity is forced to become a law violator, driven by the drastic conditions imposed by the law to the illegal street trafficker for his drug, which can be obtained in unlimited quantity if he has the price.

What is the remedy? While it would be extremely presumptuous for me to attempt to outline what the remedy should be, I do feel that I can say who must administer the remedy if the disease is to be cured; the medical profession, and it alone can solve this problem.

I take the position that the management of drug addiction is not a police or penological problem, on the contrary it is purely and exclusively a medical problem.

The drug addict is suffering from a disease with a definite pathology. This is the one great fact involved, which once given the consideration its importance merits, by the medical profession, will be a tremendous advance in the solution of the problem.

Before laws can be enacted which will deal intelligently with the situation, the medical profession and the public must needs be educated. This should be done by the Public Health Commission. This commission should inaugurate an educational campaign as to the facts of addiction. Medical experimentation and research work should be scientifically pursued and the results made known through the usual publicity channels of the Department of Public Health.

Such information given to the physicians and the public, coming from a source of recognized authority, would do an inestimable service in dispelling the fallacies of the past and present, and presenting the matter in its true light for the future. These are things done with other diseases, affecting Public Health. Why not set the machinery to work in drug addiction?

There are possibly as many drug addicts as there are consumptives. In a reprint from *American Medicine, Dec., 1917,* in speaking of a better understanding of drug addiction, has this to say:

"We earnestly believe that a state commission should be created consisting of from three to five medical men, and from five to seven laymen, whose duty will be to investigate the situation from every conceivable angle, medical, sociological and legal.

"The medical members should be men of broad training and experience in medicine, and capable of carrying out an investigation of the problems of drug addiction, as thorough as those of the British Medical Commission, which has done so much to clear up many obscure points in medicine and surgery.

"Such an inquiry with adequate facilities will be able to ascertain the true pathology of drug addiction. Study present methods of treatment and give the world definite and dependable information as to the control and cure of the disease.

"It is reasonable to expect that such a commission would be able to obtain a wealth of reliable information which would permit our law makers to frame an effective narcotic law that would receive the support and co-operation of the medical profession."

At the present time we have but meager data of this disease founded upon scientific facts. Past treatment has been largely empirical, and based on false premises. Those who have devoted their attention to scientific investigation have arrived at the important conclusion that there is no establised line of treatment for drug addiction.

It does seem, in these days when so much attention is being given to relieve human suffering, that this disease assumes sufficient economic and sociologic importance to call for institutions to which drug addicts may go for investigation, without publicity or humiliation, where treatment based upon scientific

knowledge could be given. This would prove not only beneficial to the addicts, but could be made a valuable teaching institution for the physicians.

This is one of the important, if not the most important, function of such an institution, for it is uniformly recognized by all who have given this question serious thought and study, that the most essential need today in handling it is education.

Hon. Geo. H. Whitney, Chairman of the Joint Legislative Committee appointed by the Legislature of the State of New York, to investigated habit forming drugs, after holding repeated hearings, gathering testimony from every possible source, in his report makes the following statement:

"The result of these hearings were: First: The discovery of the vast extent of this affliction of drug addiction. Second: Its recognition as a disease causing intense suffering and distressing physical manifestations. Third: A realization that the great mass of the public, officers as well as private individuals, is entirely ignorant of the conditions existing, of their gravity, of their character or complexity. Fourth: That the medical profession as well as the laity have no proper conception of the physical, pathological, psychical or social causes which undoubtedly lie at the bottom of this serious morbid condition or disease."

These are the conclusions arrived at by this committee, after a most thorough investigation, and the report of its findings stands as a serious indictment of our profession as related to the question. We must awaken to our responsibility, for the most pressing and vital need in the present condition of the drug addict can only be met in the medical profession, for without the information that an educated medical professional can give, nothing will ever be accomplished in the control of this grave condition, or in the enactment of legislation which will intelligently meet the situation.

In conclusion I wish to say that I feel deeply on this matter and realize that I have in this feeble effort failed to do justice to it. If, however, it will create any interest in this serious public menace, I shall feel amply repaid for the attempt, for I have every confidence in our profession to do its duty whenever and wherever it recognizes it, and once we realize that drug addiction is a legitimate problem of medical practice, its correction will receive the support of all right thinking and conscientious physicians.

THE TESTING OF DONORS FOR BLOOD TRANSFUSION

By C. W. Waddell, M. D.,
Fairmont, W. Va.

Read Before the Medical Section, Fifty-Second Annual Session, West Virginia State Medical Association, May 20-22, 1919.

Following the introduction into the human circulation of blood from another human being, there may be phenomena of reaction varying in degree from the entirely negligible to even fatal results. The ultimate cause of most of these phenomena is unknown. There are two, however, usually more or less serious, which in practically every instance are preventible, and it is to the consideration of these that this paper is addressed.

Haemolysis, perhaps more commonly spoken of as laking, is an interesting bit of biological chemistry, with which we are all more or less familiar, and refers to the process in which the red blood corpuscles are destroyed as such, the

stroma of the cell being violated and the contained haemoglobin set free. As you will no doubt remember this takes place promptly on mixing blood with distilled water. The same effect is produced by the venom of certain snakes, the products elaborated by certain bacteria, and by various other agents, both organic and inorganic in origin. It is now well known, also, that the serum of certain individuals will haemolyze the red corpuscles of other members of the same species. The exact nature of this biological property of serum is not known, but it is referred to under the name of haemolysin. When the haemolysin exists in the blood of an animal of the same species as the corpuscles on which it exerts this specific action, it is called an iso-haemolysin.

In the early days of transfusion it is probable that haemolysis was responsible for many of the serious and fatal results following this now common procedure. Just why haemolysis in vivo should be followed by such a severe reaction is unfortunately not understood. A rational explanation which has been suggested is that the haemolysis liberates split protein products highly poisonous in nature.

Of a somewhat similar nature are the biological entities known as agglutinins. As you well know, the familiar Widal reaction depends for its demonstration on the presence in the patient's serum to be tested of a specific substance capable of agglutinating or clumping the typhoid bacilli and no others. Likewise there exists in the serum of certain individuals specific substances of this nature which are capable of agglutinating the red corpuscles of certain other individuals of the same species. All of these substances which clump or agglutinate other substances for which they are specific are called agglutinins. As in the case of the haemolysins, those which are specific for the red cells of members of the same species are called iso-haem-agglutinins. As no confusion can arise from doing so, we shall for convenience simply use the terms haemolysins and agglutinins.

It is not clearly understood just what pathological effects may result from the agglutination of red cells following transfusion. As, however, the clumps of agglutinated red cells in vitro are very frequently microscopic in size, it is conceivable that clumps of agglutinated cells in the circulating blood might by mechanical means alone be productive of serious results. Aside from this possible mechanical effect haemolysis probably occurs in the clumped cells at a later period. So far as the writer has been able to ascertain from the literature on the subject no definite pathological effects have been observed from post-transfusional agglutination, which could not be better explained by haemolysis, though the blood of the recipient in a few cases has been observed to show active phagocytosis of red cells shortly after a transfusion.

Apparently, then, the prevention of agglutination is of minor importance as compared with that of haemolysis. From the standpoint of testing donors and recipients as to compatibility for transfusion, however, this relative importance of the two substances is more apparent than real, as will appear further.

Haemolysis are believed to exist in the blood of only about 25% of persons; and their occurrence, moreover, has been shown conclusively to follow the laws governing the occurrence of the agglutinins. That is, the haemolysins, when present, show the same relationship to the different groups as do the agglutinins; and most important of all, haemolysis occurs in no instance in which

agglutination is shown to be absent. The actual determination of haemolysis is tedious and time-consuming. The test for agglutination is easily and quickly done. In these facts lie the great importance of testing for agglutination. Having done this, one is fully justified in inferring similar results as to haemolysis. It is seen thus, that in performing tests for agglutination, haemolysis or its absence is simultaneously demonstrated.

Moss, supplementing the work of earlier investigators, has shown that the blood of all human beings may be divided into four groups, with reference to the behavior of the sera of the various groups to the corpuscles of other groups, and vice versa. The classification of Moss differs slightly from that of Jansky, his predecessor, but has received wider recognition, and for this reason is the one usually referred to as standard. For the present, however, it might avoid confusion to refer to it as Moss' classification.

The characteristics of the different groups are as follows:

GROUP I. The serum of this group contains no agglutinin for any red cells. Its cells, however, are agglutinated by the sera of the remaining three groups.

GROUP II. This serum contains one agglutinin, called for convenience, agglutinin "A," which agglutinates the corpuscles of Group I and Group III. The corpuscles of this group are agglutinated by the sera of groups III and IV.

GROUP III. This serum also contains one agglutinin, for convenience called agglutinin "B," which agglutinates the corpuscles of Group I and Group II. Its corpuscles are agglutinated by the sera of groups II and IV.

GROUP IV. The serum of this group agglutinates the corpuscles of all the other three groups, and therefore contains agglutinins "A" and "B." Its corpuscles are not agglutinated by the sera of either of the other three groups. It will be noted that the characteristics of this group are the exact opposite of Group I.

In determining the group characteristics of 1,000 men, Karsner found the incidence to be as follows:

Group I	3.1%
Group II	42.4%
Group III	8.3%
Group IV	46.2%

The relationship of the various groups is shown in tabular form as follows:

	SERUM			
CORPUSCLES	I	II	III	IV
Group I	Neg.	Pos.	Pos.	Pos.
Group II	Neg.	Neg.	Pos.	Pos.
Group III	Neg.	Pos.	Neg.	Pos.
Group IV	Neg.	Neg.	Neg.	Pos.

TECHNIC OF THE TEST

In the early days of this subject the tests for agglutination and haemolysis were macroscopic methods, requiring several cubic centimeters of blood, incubation, and from one to twenty-four hours for their completion. The results were reliable but the methods were objectionable because of the amount of blood required as well as from the standpoint of time. Though still described in standard textbooks, they have been deservedly displaced by the quicker and equally reliable microscopic methods. Consequently only a knowledge of the latter is of any practical value.

The method to be described in this paper is essentially the one described by Moss in 1910. As the performance of the test is nothing more than the application of well known biological principles and technical details in every-day use in serology, it seems useless to bur-

den the subject with eponyms referring to modifications of technic introduced by different workers. This tendency in the recent literature on the subject is to be deprecated because it is confusing and serves no useful purpose.

The exact procedure to be followed in any given case depends on whether it is desired to establish compatibility or the reverse between patient and donor indirectly by determining their group relationship; or directly by testing the serum of each against the corpuscles of the other. For purpose of illustrating the principles involved the latter method will be described first.

OBTAINING BLOOD SPECIMENS

The lobe of the ear or the tip of the finger is pricked in the usual way. Into one small test tube or Wright capsule, is allowed to flow three or more drops of blood for the collection of serum. Around most physicians' offices are usually to be found small glass tubes such as vaccine points and their scarifying needles are dispensed in. These make suitable tubes for this purpose. In the absence of these a piece of glass tubing 8 to 10 mm. in bore and about 3 c. m. long, with one end sealed in the flame makes an ideal tube for the purpose, which is not easily broken, and is suitable for dropping the metal shield of any type of centrifuge.

Into a second test tube of any size containing one c. c. of 2% sodium citrate solution, or what I have found to be equally satisfactory, the ordinary normal saline solution always on hand in laboratories and hospitals, allow one drop of blood to flow. Shake the tube a little at once, and the resulting suspension is ready for use. It is not necessary to wash the corpuscles, as was taught in the original technic. This is the chief departure from the original method of Moss.

The blood for the serum is allowed to clot spontaneously with the separation of serum, which usually occurs within fifteen minutes; or if greater haste is necessary the blood is whipped with the platinum needle until clotting results and the tube centrifuged rapidly for a few minutes when perfectly satisfactory serum will have appeared on top of the clot. Serum so obtained will probably be stained with haemolyzed red cells, but this in no way detracts from its value or introduces any factor of confusion. Aseptic precautions do not need be observed in the preparation of the serum and the corpuscle suspension, but glassware used should be clean and free from the remains of previous tests. One other small point, however, cannot be emphasized too much. Before collecting the specimens each tube should be plainly marked by the wax pencil or other means showing the origin of its contents; otherwise such uncertainty will often prevail at the conclusion of the test that the results will be of little value, and the test must be repeated.

Having in this manner prepared the corpuscle suspension and the serum from both donor and patient, the test proper is ready to be done.

In the centre of a clean coverslip is placed one platinum loopful of the donor's serum. The same quantity of the patient's corpuscle suspension is mixed by means of the loop with this drop of serum, after which the platinum loop is to be carefully flamed until clean, and ready to be used again. A little vaseline is then smeared on one edge of the coverslip, after which a clean slide with a central concavity is inverted over the slide, this hanging drop preparation is

turned right side up and placed on the stage of the microscope for examination. For this purpose the writer uses only a low power dry lens (Bausch and Lomb 2-3 inch) and swings the Abbe condenser out of the field.

In a similar manner a second preparation is made of the patient's serum and the donor's corpuscles. It is here also particularly important that the two preparations be plainly marked showing the contents of each.

Usually by the time both preparations are ready for the microscope the first one will be ready to read. When agglutination occurs at all it nearly always does so within five minutes, and many times in two minutes or even less. If agglutination is apparently absent from either preparation it should be removed carefully from the microscope, and tilted slowly back and forth a few times, then allowed to settle for fifteen minutes when a final reading can safely be made. Absence of agglutination at the end of this time may safely be interpreted as permanently absent.

The appearance of the red cells when they are agglutinated can be better appreciated by being seen than from a description. The clumping, however, is so well marked that after once having seen a positive reaction there should never again be any doubt in the observer's mind as to the result. Even in these microscopic preparations the clumps are frequently of such size that under suitable illumination they can easily be seen with the naked eye, appearing as minute grains of reddish sand. When agglutination is absent the red cells remain discrete unless rouleaux formations takes place as occasionally happens. This is not confusing and is easily differentiated. When agglutination is absent no amount of agitation of the suspension will cause the cells to clump, and groups of cells so coalesced will promptly separate on being allowed to remain quiet for a few minutes.

It will be noted that the platium loop is employed in this technic rather than the capillary pipettes usually mentioned in this connection. Capillary pipettes are rarely at hand outside of serological laboratories, few persons know how to make them, and if purchased they are expensive and easily broken, besides being difficult to clean. Either a separate pipette should be used for each serum and each suspension, or much time wasted in washing a single one. Inexperienced users are also likely to have much annoyance from the introduction of air bubbles into their mixtures, and are less likely to obtain accurate quantities. The platinum loop or a suitable substitute therefore possesses none of these disadvantages, is easily cleaned after each using, and enables one to place more accurate quantities upon the coverslip.

The test for compatibility can be performed in much less time in laboratories or by other persons properly equipped if a group determination be made of both donor and recipient — the indirect method. To make group determinations it is necessary that the technician have on hand either the serum or corpuscle suspensions of persons of known group. As corpuscle suspensions are not capable of being preserved for any condsiderable length of time without their becoming so degenerated as to vitiate results obtained from their use, it is better in practice to have on hand sera of known groups.

Serum can be preserved under suitable conditions for many months, perhaps for years, without losing any appreciable amount of its agglutinating properties. If collected under aseptic conditions and a small amount of some preservative be

added, Trikresol 0.25% for instance, small tubes ready for use may be kept in the ice box for many months. Even a considerable amount of bacterial contamination does not materially affect the value of the serum for this test. Sanford at the Mayo Clinic recommends preserving it in dried form, allowing a loopful to dry on a coverslip, and keeping the coverslips so prepared wrapped in paper in the ice chest. For use one has merely to add the corpuscle suspension. Sanford states that he has found slips so prepared to be satisfactory for periods of over two months, the longest period he was able to report on at the time of presenting his paper. I have been using these preparations for over two months and they are yet as active as when first made. Just how long it would be safe to rely on them has of course not yet been determined. At any rate it is a simple method for transmitting specimens through the mails, and it makes it possible for anyone with a minimum of equipment to do his own tests by simply procu ring a few coverslips containing serum of known grouping.

Owing to the peculiar relationship existing between the sera of groups II and III and the corpuscles of the other groups, and between themselves, as will be seen at a glance at the diagram, the group to which any person belongs may be quickly determined by simply testing a suspension of his corpuscles against serum II and serum III. A single drop of blood for the corpuscle suspension is all that is required. In this manner a group determination for both donor and patient may be made in five minutes if necessary.

It is the practice in some large hospitals to make a group determination of all surgical patients a routine on entrance, and this becomes then a part of the patient's clinical record. A list also of classified persons who are willing to act as donors is kept on hand. This practice prevailed to some extent in many of the field and base hospitals in the zone of hostilities during the recent conflict. The usefulness of this practice is so apparent, and the effort required so small, especially, where a clinical laboratory is maintained, that it should commend itself more widely for adoption.

Vincent has described a macroscopic method which may be performed on a glass slide or other piece of glass, and permits the use of a drop of whole blood. This test requires having on hand citrated serum of groups II and III, which requires rather careful preparation. In the hands of a trained observer, such as the author of the method, this can be used, but many times the results are in doubt, and resort has to be had to the microscope. The time saved over the microscopic method is negligible, and it would seem to the writer that this method has little to commend it except to employ it in the rare emergency when a microscope is not at hand, and then not without some doubt as to the validity of the result.

The impression is not intended to be conveyed that the method here described is the only one, or even the best one. In the hands of other workers other methods might possess advantages. I have attempted to present merely a simple working plan, the technic of which can be learned easily by anyone possessing even a rudimentary knowledge of the microscope.

Another good method is that of Rouss and Turner of the Rockefeller Institute, which makes use of citrated whole blood. While presented originally as a simplified method, my own impression is that it would offer more difficulties to the aver-

age worker than the one outlined above. Those interested are referred to the original presentation of the authors.

From the amount of time required in describing this test for donors it might be inferred that the results are in all instances infallible. Perhaps to a greater extent than most laboratory tests, as well as diagnostic signs and symptoms in general, this is true. Unfortunately, however, it is necessary to state that there have been reported a few instances, fortunately extremely rare, where post-transfusional haemolysis has occurred, when the in vitro tests performed by competent persons have shown the bloods of both donor and recipient to be compatible. Such instances are cited by Drinker and Brittingham, and by a few others. It would appear that in a very few instances there is a factor of incompatibility which we have not yet learned to recognize by preliminary testing. This certainly does not detract from the value of a test which is reliable in practically one hundred percent of cases. The most value is attached to these tests by persons whose experience has been greatest in transfusion.

Anyone who is conversant with the literature on transfusion appreciates that the last word has not yet been said as to method. Under the most ideal conditions reactions of some degree occur in at least forty percent of cases. Our knowledge of the real cause of these reactions has not yet reached far beyond the speculative stage, though much careful research has been done, and is now in progress. There is every reason, then for employing whatever knowledge we may have gained from costly experience in ruling out the grosser and more dangerous types of reaction following a procedure which bids fair to be a really great addition to our therapeutic equipment.

Aside from the standpoint of biological compatibility as determined by tests for haemolysis and agglutination, it goes without saying that donors should be healthy, free from disease, and where circumstances will permit, known to have a negative blood Wasserman Test. This phase of the subject does not belong legitimately to the paper.

It will many times happen, especially where the available donors are limited in number, that no available donor will belong to the same group as the patient. Unquestionably it is highly desirable that this should be so when possible. Experience has shown, however, that transfusions may be done with a considerable degree of safety, even in the face of incompatibility as shown by agglutination tests, provided, however that the incompatibility consists in the donor's serum containing agglutinins for the patient's corpuscles, *never the reverse.* The factor of safety operating here, is likely the fact that the donor's serum, being small in amount as compared with the total mass of the recipient's blood, is immediately on introduction so diluted as to become inactive. It has been shown experimentally in vitro that serum loses its agglutinating power on being diluted as much as one to twenty.

For this reason, persons belonging to Group IV, whose corpuscles are not agglutinated by the sera of any other groups, are sometimes spoken of as the universal donors. That the blood of group IV individuals may be safely used for transfusing persons belonging to other groups has been the experience of Lee, of Drinker and Brittingham, and of most other observers, though reports of the Interallied Surgical Conference state that "fatal accidents have occurred from agglutination of the blood corpuscles by the donor's plasma, but the

danger of this is relatively small and it may be disregarded at an advanced post.''

Group I, for similar reasons, is sometimes called the group of universal recipients.

In writing this paper it has been our intention to comply with all of the conditions implied in the invitation of our worthy president, who asked me to present a short paper on the subject. For my evident failure I hope I have had both his and your tolerance. For this reason, as well as to avoid obscuring the important points of the subject, many interesting details have necessarily been sacrificed. For those interested in pursuing further the subject a fairly extensive bibliography is appended.

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VISCEROPTOSIS FROM THE NEUROLOGIST AND PSYCHOPATHIST STANDPOINT

By ALEX R. MACKENZIE, M. D.,
Senior Assistant Huntington State Hospital,
Huntington, W. Va.

Read Before the Cabell County Medical Society, Huntington, W. Va., May 27, 1920.

Nothing new has been said in the last ten or fifteen years that would throw additional light on this confusing and complex subject, and be of any aid to the Neurologist and Psychopathist.

In the past the Neurologist and Psychopathist have held themselves aloof from the Internist and Surgeon, or the Surgeon and Internist have kept away from the Neurologist and Psychopathist, I do not know which, but not so today, and it is fortunate for this class of sufferers as in many other conditions that

such is not the case, because I believe each can be of great material assistance to the other.

As to the Pathogenesis of visceroptosis divergent views are held, some believing that the condition is congenital, others that it is acquired, while others hold a middle ground. In such a short paper as this it will be impossible to go thoroughly into details as to the different views and the reasons for the same.

However, it seems to be the census of opinion of the best men that the condition is congenital, and in cases where the defect is so slight as to escape notice, yet there exists that weakness or predisposition whereupon the individual after having a long illness, child birth or a real loss of weight, the defect shows up and is recognized for the first time.

Anthropometric measurements have been made, giving the various diameters, circumferences and distances between fixed bony land marks, an adaptation from the Germans, and later taken up by Dr. J. C. Hemmeter, of Baltimore, who recorded a great many of the measurements. They tried to show that the measurements proved that there existed an abnormal displacement of one of the viscera and formed an index upon which a diagnosis of visceroptosis, congenital or acquired, could be made.

For the most part the measurements are used as a bit of "grandstand play" in writing up cases in gastro-enterological clinics, and the observations forming part of the method have value, but only as follows, for instance; the narrow subxyphoid angle is a very strong pointer to visceroptosis. The free or detached tenth rib is another anomaly which is a pointing finger, yet both signs do not always go together even in definite and extreme cases. Nevertheless the narrow subxyphoid angle and the detached tenth rib should attract the attention of the examiner who is seeking the cause of a Psychosis or Neurosis. So we do not have any definite index from such methods any more than we can tell a man's disposition or honesty by the weight of his brain, or the dimensions of his cranial cavity. We can perhaps get a good impression from observation, but not an equation based on measurements, yet the Germans have spent years taking and recording cranial measurements, so we must depend on the x-ray, palpation, auscultation, etc., as definite diagnostic aids in the study of the physical abnormality, and close association with our patient, psychometric analysis and studying the mental and neurological signs and symptoms in determining how much of a mental or neurological defect we have, or to what extent the physical changes are causing the mental and neurological symptoms. Hence, the term: "Asthenia Congenita Universalis" is self explanatory.

In many extreme cases even with the usual constipation present there are absolutely no symptoms of "nervousness," but such may develop later in life after a long illness, loss of weight, etc., but on the other hand these "congenital lightweights" are often brilliant in the arts, science, literature and music.

It would seem that when the nervous element predominates as though the nervous system as well as the muscular system had been born out of balance away from the normal, as some men are born to be tall, others short, some with hare-lip, and others come into the world as cyclops, although extreme comparisons, I trust that you get my point. They are congenitally out of order, nerves, bony frame-work, musculature endocrine organs all unbalanced. Then when a

constitutional inferiority exists it may or may not be associated with psychopathic or neurotic tendencies.

Let us always remember that a ptosed organ may through gravity hold its contents unduly failing to pass it along on time and the circulation and nerve supply is liable to be altered in the ptosed organ to stretching of the blood vessels and nerves, and possibly a kinking or twisting of the same, and its slow changes following in motility, in secreatory function and all sorts of viscious cycles established. Added to this the tastes, likes and dislikes for certain foods, "selective diets" with its damaging effects on the internal coat of the intestinal canal congestive and infiltrative changes occur, the latter in itself lowering the absorptive power of the intestine for certain foods and the protective power from invasion with any abnormal flora that may exist in the intestinal canal makes it a long story and becomes all the more complex the deeper we study the problems that are present and may arise. We must then first consider the physical congenital defect with its dragging viscera on vessels and nerves and like any other reflex or irritative cause it can be plainly be seen that any kind of a psychosis or neurosis can be produced, plus the toxaemia in certain cases we do have as a result any kind of a psychosis or neurosis, and the same as produced from any other causes can be divided into two clear defined states, with either depression or excitement. Hence, the cold blooded classifications found in textbooks, as symptoms of visceroptosis we find the following: pain, fatigue, marked nervous crises, hysteria, insomnia, despondency, general malaise, loss of memory, power of concentrating attention, irritability, neurasthenia, backaches, sideaches, various respiratory symptoms, cardialgia, gastralgia, etc.

In prolapse of the colon I do not believe that our symptoms are as severe or exist at all like in cases of ptosed stomachs. It may or may not be congenital, may or may not be a part of a general visceroptosis, and when it is not a part of a general congenital condition it is not reasonable for us to expect the "Nervousness" so often seen in "Asthenia Congenita Universals." Reviewing the nerve supply to the stomach and intestines it is easily understood how a ptosed organ will give us neurological and psychic conditions, and also account for the cardiac respiratory and stomach symptoms.

The stomach receives its nerve fibers from two sources, Vagi and Splanchnics. Its stimuli to movement arises within itself, but these movements are regulated by the action of the extrinsic nerve fibers so as to adapt them to varying conditions. Extrinsic nerves not only supply the stomach with efferent fibers, motor and secreatory, but also carry afferent fibers from the stomach to the central nervous system. Efferent action in general along the Vagus are motor. Fibers through the Splanchnics are mainly inhibitory. Anatomical separation of motor and inhibitory is not complete, some inhibitory are found in the Vagi and some motor in the Splanchnics. Anything affecting directly or indirectly the central nervous system the movements of the stomach may be influenced. The Vagi nucleus arises from the side of the Medulla posterior to the origin of the glossopharyngeal nerve. It is a mixed nerve with extensive distribution to respiratory, digestive organs and heart. The splanchnics are vasomotor. The great sympathetic arises from Thoracic

ganglia. The lesser sympathetic arises from the tenth, eleventh Thoracic ganglia and great splanchnic.

The renal or smallest sympathetic arises from the last Thoracic ganglia.

The large intestine, particularly the descending colon, receives its nerve supply from two sources.

1. Fibers which leave the spinal cord in the lumbar nerves, (second to fifth), passes to sympathetic chain, to inferior mesenteric gangli, which probably forms the termination of the preganglionic fiber, from this point the path is continued by fibers running in the hypogastric nerves and plexus, (Are inhibitory.)

2. Fibers that leave the cord in the sacral nerves, (second to fourth), form part of the nervi-erigentes and enter into the pelvic plexus, and may be regarded as motor fibers, as in the small intestine and stomach the motor and inhibitory fibers serve as reflex regulation and adaptation of movements. The intestine, however, is not dependent for its movements upon its connections with the central nervous system. Like the stomach it is an automatic organ, whose activity is simply regulated through its extrinsic nerves. The small intestine and the greater part of the large intestines receive viscermotor nerve fibers from the vagi and sympathetic chain. The former according to most observers are regarded as motor. It seems probable that the vagi carry in some animals inhibitory as well, but the motor predominates. The fibers from the sympathetic chain are mainly inhibitory, although some motor fibers apparently take this path. The sympathetic fibers for the small intestine emerge from the spinal cord as medullated fibers in the sixth dorsal to first lumbar spinal nerves, and pass to the sympathetic chain in the splanchnic nerves, and to the semilunar plexus. The paths of these fibers through the central nervous system are not known, but there are evidently connections extending to the higher brain centers, since psychical states are known to influence the movements of the intestine, and stimulation of portion of the cerebral cortex may produce movements or relaxation of the walls of the small and large intestine.

Violent movements may be produced by shutting off the blood supply and again temporarily when the supply is reestablished. A condition of dyspnea may also start movements in the intestines or in some cases inhibit movements, which are already in progress, the stimulus in this case seeming to act upon the central nervous system and to stimulate both motor and inhibitory fibers. When the cases are typical we are impressed with the torture that must be endured by those that have to live with them, not saying anything about the physician or surgeon that has them under his care.

Treatment: After first getting confidence of the patient suggestive treatment is of service in Neurological and Psychopathic cases. We must frighten them enough to go to bed, then put some fat on them, which often times works wonders. The use of a well fitting belt, on this many differ, but I believe the success of a belt depends on who makes it and care in trying to get one that is suitable for the particular case.

Medical Therapy: Bromides, Valerian, etc., are sometimes of service in "Nervous Cases." Those suffering with severe attacks of gastralgia, morphine with hot applications should be used, but great care should be used in the use of morphine as this class of cases becomes so easily addicted to the drug. Hydrochloric acid is indicated as in any other case of hypo-acidity and most of this class of patients have a hypo-secreation,

and it is only rarely that we have to deal with a hyper-secreation. Regular hours, outdoor life and attention should be paid to dietotherapy. Surgery is certainly indicated in certain selected cases, and it is understood that the better surgical judgment that is used the better will be the result.

Gymnastics: Setting up exercises, and general massages should be used to increase muscular tone. Baths — and when constipated laxatives, mineral oil, cascara, etc., according to the indications presented to the physician.

THE TREATMENT OF VISCEROPTOSIS

By Dr. Robert J. Wilkinson,
C. & O. Hospital,
Huntington, W. Va.

Read Before the Cabell County Medical Society, May 27, 1920.

The treatment of visceroptosis is considered under the following sub-heads: Hygenic, Dietetic, Mechanical and Operative. To maintain health and vigor it is essential that we live under the best hygenic environment. Fresh air, regulated exercise and sufficient rest is of paramount importance. In cases of ptosis with the many complex symptoms especially referable to the nervous system we must insist upon our patients following the laws of hygiene as prescribed for them.

Since one of the causative factors in visceroptosis is the lack of body fat it is obvious that wholesome, nourishing food is essential. In extreme cases it is often necessary to resort to forced feeding; because any increase in body weight tends to relieve these cases.

The mechanical treatment, to my mind, is the most important. There are many bands, belts, corsets, etc., advertised as a sure cure for all ailments. However this is not true because every case is a law unto itself and unless the support is properly made and fitted it tends to aggravate the symptoms. When it is definitely determined that a patient needs an abdominal brace most careful measurements should be taken and followed in the manufacture of same. The objection to this type of support is the inability to keep it in position. The most satisfactory mechanical support is made from four adhesive strips, three inches wide and long enough to extend from point just to left of spine to the right over anterior aspect of abdomen to point just beyond left iliac crest. Next strip is of same length and is applied in the opposite direction; third piece from iliac crest to same point on opposite side and fourth piece reinforcing others in the back. It is essential to place this adhesive just above the pelvic bone as the pressure must be from below upward. Either shave the pubic hair or place piece of gauze over this area. When these are properly applied any degree of support can be maintained without danger of slipping. The objection to adhesive is the irritating effect upon the skin, however, if changed once a week this is reduced to a minimum.

I mention the operative phase of treating ptosis more with the idea of pointing out some of the serious errors surgeons have made in the past, rather than to suggest surgery as a cure for this distressing condition. So frequently patients presents themselves complaining of pains in abdomen of varying degree and of really unknown origin. Upon examination we are only able to elicit tenderness over McBurney's point, and a his-

tory of indigestion, gaseous distention and constipation. This leads us to a diagnosis of appendicitis and operation is advised. To operate these cases only makes them worse and brings surgery into disrepute. I want to go on record as being opposed to the promiscuous habit of operating on every patient with tenderness in the right side. I dare say that a majority of such cases are suffering with either Ptosis or adhesions around the caecum. These cases should be thoroughly studied and when necessary a careful radiographic examination should be made of the gastro-intestinal tract. Of course it is possible to have adhesions complicating ptosis, in this type of cases we should free the adhesions and give them the proper support.

In very select cases and in the hands of trained surgeons certain procedures can be carried out that will give these patients great relief. In no case should surgery be advised until every other line of treatment has been tried. Time will not permit me going into the merits of each operative procedure and since surgery is the last resort I feel that a full discussion of this phase of the treatment is unnecessary.

In conclusion I wish to emphasize two points:

1. That a large majority of cases with so-called Chronic Appendicitis are not suffering with appendicitis but their symptoms are really referable to Visceroptosis. Under no circumstances should these cases be operated until a most careful examination has been made and a correct diagnosis established.

2. That the most satisfactory treatment for Abdominal Visceroptosis is rest in bed, when necessary, regulated exercise, fresh air, wholesome food and a proper fitting abdominal support, preferably one made from adhesive plaster.

HOUSE OF DELEGATES WEST VIRGINIA STATE MEDICAL ASSOCIATION

Parkersburg, W. Va.

May 17-20, 1920.

The House of Delegates of the Fifty-third Annual Meeting of the West Virginia State Medical Association was called to order by President H. R. Johnson at 9:45 p. m., Monday, May 17, 1920, in the Auditorium of the Elks' Home in Parkersburg.

After the receiving of the credentials of the delegates the report of the Committee on Arrangements was called. In the absence of Chairman Muhleman, Drs. Prunty and Jeffers, members of the Committee, gave short talks, giving details of the arrangements made by said committee for the business of the Association and the comfort and entertainment of the members and guests while at Parkersburg.

By motion the report was gratefully received and a vote of thanks and commendation extended to the committee for the most delightful and thorough manner in which they had performed their mission.

President Johnson then called upon Secretary Anderson to make the report of the Committee on Scientific Work. He responded by presenting and distributing printed copies of the programme prepared for the Parkersburg meeting. On behalf of the committee he expressed the regret that a number of papers had been offered after the programme was in print and called attention to the delegates that according to the By-Laws of the Association the preliminary copy or draft of the programme must be made thirty days before the date

of the meeting of the Association. Hence the inability of the committee to place papers, arriving late, upon the printed programme.

The report of the Committee on Publication was then called and Editor Bloss responded, reading a complete financial statement of the publication of the Association. This showed that with the $2.00 fee now paid the Journal had met the high cost of publication and that as a result this year The Journal had a little more than broke even. He urged the members of the House of Delegates to co-operate by having their Local Societies do three things:

1. Send all annual dues of the Association on or before April first of each year to the State Secretary in order that the mailing lists may be made out according to the postal laws and not entail the publishing of extra copies to meet the demands of those tardy in sending in their dues.

2. In the purchasing of supplies to favor the advertisers in the Journal and in ordering mention the fact that you are doing so because of their advertising in the Journal.

3. Send to the editor each month any items of local news which may happen in their respective neighborhoods: Deaths, births, marriages, changes of location, trips, post graduate pursuits, etc., in which the local medical profession figure.

This report was received with thanks and referred to the Council.

In the absence of any member of the Committee on Public Policy and Legislation this report was passed over, and the report of the Secretary was called. Secretary Anderson responded with the following:

SECRETARY'S REPORT

As the West Virginia State Medical Association convenes for its Fifty-third Annual Session within sight of historic Blennerhassett Island, we might say that our career has been brilliant even as that of the statesman who made that island famous, but we also must admit that it has been rather erratic even as his undoubtedly was. From year to year we should have had a steady substantial growth in membership, but in this we have been erratic. We, as an organization, considering our boundless energy and brilliancy of talent repeatedly demonstrated in our annual meetings, should probably fill a more prominent place in the affairs of our Little Mountain State and make our influences more keenly felt in professional and public health channels.

During the year 1919, which period this report covers, we as an organization have seemed to fall into the general apathy so characteristic of the reconstruction period and which seems to pervade the very atmosphere of our country. The Component Societies of Braxton, Greenbrier Valley, Hancock, Nicholas-Webster, and Taylor have almost ceased to function while that of Wayne, after a short lived career of two years, gave up the ghost and asked to be submerged into the Cabell county organization and with this addition Cabell Society has failed to sustain its former record in membership. The result is a shrinkage of our membership from 957 in 1918 to 905 in 1919. Each year from 1915 the total membership gradually increased and we had hoped to push it over the 1,000 mark by 1920, but our 1919 slump dispelled this dream.

To some extent this decrease has been due to the fact that those of the profes-

sion who served their country in the time of her great necessity, have been too busy gathering up the tangled threads of their civilian life and work to pay much attention to organization life and many have shifted their locations and failed to move their society membership or retain it in their old location. But we fear that the officers, the councillors, and the individual members have lived too much in the enthusiasm of our annual gatherings and have not realized that the success of our organization depends more upon their individual interest and enthusiasm in and for their local societies and the sustaining of the same throughout the year. The whole cannot be stronger or better than its integral parts. The state organization cannot grow unless the county societies grow.

The membership as stated above is distributed in districts as follows: First District—Hancock, 1; Brooke, 9; Ohio, 90; Marshall, 40; Marion, 49; Taylor 0; total 189. Second District — Monongalia, 25; Preston, 9; B. R. T., 50; G. H. H. M., 22; Eastern Panhandle, 44; total 150. Third District—Harrison, 69; Doddridge, 3; Ritchie, 17; Lewis, 21; Braxton, 2; Nicholas-Webster, 1; Upshur, 12; total 125. Fourth District—L. K. & O. V., 44; Cabell, 59; Tyler, 8; total 111. Fifth District—Logan, 20; Mingo, 20; McDowell, 42; Mercer, 46; Summers, 13; total 141. Sixth District—Kanawha, 82; Raleigh, 37; Fayette, 47; Greenbrier Valley, 23; total 189.

During 1919 the Component Societies gained 53 new members, lost 33 by removals and 3 by death, and 75 were dropped for failing to pay their dues. Fayette, Greenbrier Valley, Harrison, Logan, Marshall and Summers Societies gained in membership during 1919, while all the rest lost except Upshur and McDowell. The latter maintained its membership in spite of the fact that it lost not less than six members by removals from the county. Fayette carried off the honors in growth, with Marshall and Harrison following in her wake. The greatest slump in paid membership are seen in Cabell and Kanawha.

To lose 75 members for nonpayment of dues seems a shame. Surely many of these, if tactfully yet persistently reminded of their forgetfulness in this matter, would have paid their dues.

But the picture is not entirely gloomy, for already 875 members have paid dues for 1920 and 31 new members, distributed among fifteen Component Societies, have been acquired. Surely, with this good beginning, if each and every one of us will return home with a determination to increase the membership of our Local Society, we can more than reach the 1,000 mark by the time we meet in 1921. Let us make motto for the coming year "One Thousand Members or Bust."

Since our Clarksburg meeting reports have reached your Secretary that The Great Reaper has not withheld his sickle from our ranks and that ten of our number have lost in their personal struggle with our Arch Enemy—Death. The following is the reported list:

Dr. C. W. Birdsall, Elkins, B. R. T. Society, February 11, 1919; Dr. Boas B. Cox, Morgantown, Monongalia Society, May 10, 1919; Dr. T. Henry Becker, Bluefield, Mercer Society, June 8, 1919; Dr. Isaac Smith, Peel Tree, B. R. T. Society, January 15, 1920; Dr. A. M. Spangler, Pageton, McDowell Society, January 18, 1920; Dr. L. F. Keever, Parkersburg, L. K. & O. V. Society, February 17, 1920; Dr. T. A. Harris, Parkersburg, L. K. & O. V.; Dr. Howard C. Sarver, Charleston, Kanawha Society; Dr. C. H. Ice, Mannington, Marion Society, March 18, 1920; Dr. S. J. Posten,

Morgantown, Monongalia Society, May 11, 1920.

Let us do homage to these our brethren who have given their lives to alleviate the suffering of others.

Since our 1919 meeting your Secretary has received and transmitted to your Treasurer the following state dues:

Date	No. of Members	Amount
5-21-19	26	$114.00
8-30-19	57	270.50
10-11-19	20	91.91
12-12-19	20	100.50
3-22-20	362	1,759.75
4-5-20	265	1,318.00
5-11-20	263	1,286.00
Total	1,012	$4,940.66

Note: Uneven dollars due to fractional dues paid by those returning from military service.

The Secretary has in his possession several checks which have been received since last report to Treasurer, which will appear in next report.

The following Component Societies have not yet returned to your Secretary the report blanks sent them for data with reference to their 1919 activities: Braxton, Brooke, Cabell, Greenbrier Valley, Hancock, Lewis, Mingo, Ohio and Taylor. The reports are required by the By-Laws and should always be filled out to the best knowledge of the local secretary and returned promptly.

Your Secretary has repeatedly endeavored to compile a complete list of the members of the Association who served during the Great War. He must of necessity obtain this information from the local secretaries. Some have responded promptly; others totally ignored this appeal. If he has not done so, will each local secretary not kindly prepare such a list and forward it at once to the state secretary.

The life of each local society depends almost wholly upon the activity of its respective officers, especially the Secretary. Will not the delegates in attendance return home determined to help and encourage these officers to renewed efforts toward building up each Component Society. Make a list of the available practicing physicians within your bailiwick, appoint a committee of two or more men to visit those who are not members and invite them to join your society. Our membership is only about 50 percent of the available material in our state. Earnest and systematic effort on the part of the members of the local societies will win and bring the majority of these within the fold. Then when they do join see to it that your monthly meetings are made so interesting that they will not think of dropping out or leaving their membership lapse. Give each member something to do during the year. An active partner is almost always an enthusiastic one. Now this is an appeal to YOU; do not "pass the buck," do your part—carry on.

Expressing my most sincere appreciation of the co-operation of the officers and councillors of the Association, the Editor of the Journal, the Secretaries of the Component Societies, and the L. K. & O. V. Society in the work which has fallen to my lot to do during the past year, I respectfully submit this report.

J. HOWARD ANDERSON, *Secy.*

The Secretary's report was duly received and handed over to the following committee, appointed by the president: Drs. Ogden, Simpson and Jeffers.

The report of the Treasurer was then called and Dr. Nicholson responded, presenting the following report, which was received with thanks and turned over to the Council for audit and further action:

Charleston, W. Va., May 15, 1920.

HUGH G. NICHOLSON, TREASURER
In Account with The West Virginia Medical Association

1919		Cr.	Dr.
May 28	By Check Welch Printing Co	$ 57.85	
June 25	By Check W. Va. Medical Journal	500.00	
July 15	By Check McClure Bros., Printing	4.75	
Oct. 27	By Check Jas. R. Bloss, Salary	500.00	
Nov. 28	By Check Lohmeyer, Treas. Bond	10.00	
1920			
Jan. 13	By Check Jas. R. Bloss, Salary	500.00	
Apr. 7	By Check Tribune Printing Company	11.50	
May 10	By Check H. G. Nicholson, Salary	100.00	
May 10	By Check J. H. Anderson, Salary	500.00	
May 12	By Check The Robins Company, Badges	45.00	
May 12	By Check Welch Printing Company	109.36	
May 12	By Check J. H. Anderson, Postage	29.16	
May 14	By Check Medical Defense Fund	785.00	
May 14	By Check Indigent Fund	866.00	
May 14	Balance in Bank	2,600.31	
1919			
May 17	To Cash, Balance in Bank		$1,066.23
May 24	To Check from J. H. Anderson		603.00
June 23	To Check from J. H. Anderson		114.00
Sept. 5	To Check from J. H. Anderson		270.50
Oct. 17	To Check from J. H. Anderson		100.50
Oct. 17	To Check from J. H. Anderson		91.91
1920			
Apr. 1	To Check from J. H. Anderson		1,759.75
Apr. 7	To Check from J. H. Anderson		1,318.00
May 14	To Check from J. H. Anderson		1,286.00
		$6,609.89	$6,609.89

Medical Defense Fund

1919			
Dec. 30	By Check to Marcum & Shepherd	100.00	
1920			
May 14	By Outstanding Loans $5,080.13		
May 14	By Liberty Bonds 300.00	5,581.79	
May 14	By Cash in Hand 201.66		
1919			
May 17	To Balance in Fund		4,896.79
May 24	To Amount from General Fund		105.00
June 21	To Amount from General Fund		18.00
Aug. 30	To Amount from General Fund		42.00
Oct. 11	To Amount from General Fund		13.00
Dec. 12	To Amount from General Fund		16.00
1920			
Mar. 22	To Amount from General Fund		281.00
Apr. 5	To Amount from General Fund		51.00
May 11	To Amount from General Fund		259.00
		$5,681.79	$5,681.79

Indigent Fund

1919		
July 15—By Amount Mrs. G. D. Lind	200.00	
Oct. 27—By Amount Mrs. G. D. Lind	300.00	
1920		
May 14—By Balance in Hand	1,442.00	
1919		
May 17—To Balance in Fund		1,076.00
May 24—To Amount from General Fund		113.00
June 21—To Amount from General Fund		19.00
Aug. 30—To Amount from General Fund		57.00
Oct. 11—To Amount from General Fund		18.00
Dec. 12—To Amount from General Fund		19.00
1920		
Mar. 22—To Amount from General Fund		320.00
Apr. 5—To Amount from General Fund		58.00
May 11—To Amount from General Fund		262.00
	$1,942.00	$1,942.00

The report of Council was then called but the report was not complete and was passed over until later.

The House of Delegates then adjourned until further call of the president.

The House of Delegates was called to order by President Johnson on May 19, at 10 p. m.

The minutes of the last meeting were read and approved as read.

Being called upon for report of Council, Chairman Jeffers made a full report, stating that the accounts of Treasurer Nicholson and Editor Bloss had been duly audited and found correct. That the action of the Medical Defense Committee had been thoroughly reviewed and approved by the Council. That the Medical Defense Committee composed of Drs. H. P. Linsz, C. R. Ogden and C. G. Morgan were reappointed for another year. That Dr. Bloss had been elected Editor for another year. And that the salaries of the Editor, Treasurer and Secretary be made the same for 1921 as for the year 1920.

The report was received, approved and the Council thanked.

Secretary Anderson then presented the following amendment to Article IX, Sec. 3 of the Constitution, which had been presented at the 1919 Annual Meeting and placed upon the table as per the Constitution until the 1920 meeting:

"The officers of this Association shall be elected by the House of Delegates on the morning of the last day of the Annual Session, but no person shall be elected to any such office who is not in attendance upon that Annual Session, and who has not been a member of the Association for the past two years."

It was explained that the amendment differed from the existing Article and Section only in that it made any delegate present eligible to office.

A vote was taken on the amendment and it was carried, and declared a part of the Constitution by President Johnson.

Dr. Ogden was then called upon for a report of the Lind Relief Committee. He responded, stating that Dr. Lind and his two invalid children had been placed in suitable state institutions and were being properly cared for. That Dr. Lind's

financial obligations had been met, insurance and debts paid and that Mrs. Lind now held a position in a Huntington hospital which amply provided for her wants.

The report was received with thanks, approved, and the committee asked to continue and instructed to draw such money from the Indigent Fund as will be necessary to carry out the original instructions of the House of Delegates.

The report on the Committee on Medical Institutions was called and Chairman Reed responded with the following report:

"At the Clarksburg meeting, one year ago, the Dean of the Medical Department of our State University addressed the body, and made a plea for a deeper interest in the Medical School of the state, on the part of the organized profession, as represented in the West Virginia State Medical Association. By resolution, a committee was named composed of the president, the president-elect and the secretary of the Association, and instructed to visit the University and acquaint itself with all the interests of the Medical Department relative to its work and needs.

"The committee made the visit of inspection and investigation and begs to submit its report.

"The Medical Department of the University carries students through two years of their medical studies, as doubtless known, and the remaining two years must be taken elsewhere.

"There are now fifty-five second year and eighty-five first year students, with two full time professors, three associate professors, and one assistant professor.

"The one building provided for the Medical Department also takes care of the School of Pharmacy. The laboratories are well equipped and class rooms well arranged.

"The first impression made upon the committee was the overtaxed condition of the building, and this is particularly true of the laboratories. They are equipped and intended for from twelve to twenty students, and are having to accommodate thirty-two. It seems that the building was just about large enough to comfortably take care of the classes at the time of its erection, and did not provide for natural growth. The student body has about doubled in the last five years, hence the very crowded condition, and it is observed also that no provision exists in way of laboratories for private or research work, for individual students or professors, hence it is not possible to render the best service in the teaching of students and nothing can be accomplished for the advance of science.

"With the attendance of medical students constantly increasing and the need for well educated physicians throughout the state rapidly multiplying, it has become imperative that steps be taken promptly to adequately provide for this very important division of the University's work.

"Every young man or woman of the state who desires to take up the study of medicine, should have the state's encouragement to the extent of making provision for that education in its University and at an expense that is not prohibitive. This prohibitive situation is becoming more and more true in the medical schools outside of the state. The expense is becoming an item of such magnitude that students of modest means cannot consider a medical education. Hopkins and like institutions have a tuition fee alone of two hundred and

forty ($240.00) dollars per year as compared with twenty-five ($25.00) dollars at our University.

Under present equipment and provision, our students, as has been stated, must now spend two years out of the state in other medical schools. This is not desirable and moreover the difficulties are becoming increasingly great to place these students in other universities. Formerly all of the state's two year students could be sent to one or two schools, but that is no longer possible, because the number of students is increasing, and also for the reason that virtually all medical schools are now placing a numerical limit upon the size of classes.

"Your committee, therefore, believes that the state is facing, in its medical school problem, a serious situation and is confronted with conditions which will require a large expenditure of money to meet, but they are of such importance that they should receive immediate and serious consideration.

"A new medical building is required. It should be adequate to provide for the probabilities of the future as well as to meet the demands of the present. It should be large enough and sufficiently equipped for a full medical course of four years, even though the establishment of this course may not be feasible for the immediate future.

"The present building could be devoted to the exclusive of the School of Pharmacy, for which it is well adapted, and with space about such as that department will be needing.

"In addition to the erection of a new building, provision for a larger faculty of full time professors should be favorably considered.

"We also think it advisable that a separate budget should be considered for the medical department, and sufficiently large to insure ample support for all of its needs.

"We are convinced that, in the near future, a full four-year course for the Medical School will be a necessity and consequently the problem of a University Hospital may soon present itself for consideration—an institution to which all the counties of the state might send their indigent patients, thereby affording clinical teaching facilities to the Medical School and making at the same time the medical skill of the University available to the entire state.

"The committee has outlined an extensive and far reaching program, but from the impression received on their mission of investigation, a blind committee could scarcely have escaped this vision of exceptional opportunity and great promise for useful service, which our Medical School holds for the future, if there exists in the state the spirit and wisdom and courage to understand and act.

"Medical education is a Public Health question. It is fundamental and vitally concerns every one within the borders of the Commonwealth. We have been accustomed of thinking of the medical profession as overcrowded. That time is past. Fewer men are entering the profession than ever before, because of the unusual amount of time consumed and the great expense involved. Just how many communities of the state are suffering for lack of medical attention. The condition will become increasingly worse as the years pass, if we do not open our eyes to the situation and solve the problem for ourselves. By providing a medical school worthy of the state, attractive, efficient, all sufficient and within the reach of the deserving youth of limited means, we shall establish a guarantee

for the future security and welfare of the people with respect to life and health issues, that can not be vouched-safe to them in any other way.

"Your committee expresses the hope that the West Virginia State Medical Association will give its official endorsement to the proposition of a new medical building at the State University with adequate equipment as well as an enlarged teaching force; and that a special committee be appointed and instructed to use every honorable means to have legislation enacted to this end by the next Legislature.

"COMMITTEE—
"ROBT. J. REED, *Chairman,*
"H. R. JOHNSON,
"J. HOWARD ANDERSON."

In this cinnection Secretary Anderson presented a resolution passed by the Scientific Section and recommended to the House of Delegates by said body for adoption as follows:

"Be it resolved that a committee be appointed by the president who shall, on behalf of the Association, present an appeal to the Legislature for an ample appropriation to establish an A-1 Medical School at University of West Virginia."

Dr. Reed's very able report was accepted with thanks and was made part of the records.

The resolution of the Scientific Section was approved, adopted, and the recommendation ordered carried out.

President Johnson then appointed the following committee: Dr. Robt. J. Reed, chairman, Dr. V. T. Churchman, Dr. L. V. Guthrie, Dr. J. Howard Anderson, Dr. C. O. Henry and Dr. Jno. N. Simpson.

By motion this committee were instructed to present both the report and the subject matter of the resolution to the State Board of Education, the State Board of Conrol and the Governor of the State.

The House of Delegates then adjourned till Thursday morning.

The House of Delegates was called to order by President Johnson Thursday morning, May 20th, at 8:20 o'clock.

Minutes of the preceding meeting were read and approved as read.

Election of Officers was then made the order of business.

Nominations for president were called for and Dr. Frank LeMoyne Hupp nominated Dr. J. Howard Anderson. Dr. Henri P. Linsz moved that nominations be closed and that Dr. Anderson be elected by acclamation.

The motion was duly seconded and carried.

Dr. Anderson was then elected by acclamation.

Nominations for First Vice President were then in order. Dr. H. E. Gaynor, of Parkersburg, was then nominated. By motion nominations were closed and the Secretary was instructed to cast the ballot of the Association for Dr. Gaynor. This was done in due form.

Dr. S. G. Moore, of Elkins, and Dr. Chas. O'Grady, of Charleston, were placed in nomination for Second Vice President. After a ballot duly taken, Dr. Moore was declared elected.

Dr. O'Grady was then duly elected Third Vice President.

Dr. Robert A. Ashworth, of Moundsville, and Dr. E. H. Thompson, of Bluefield, were then placed in nomination for the Secretaryship, and after the ballot was taken Dr. Ashworth was declared elected. Dr. Thompson forthwith moved that it be made unanimous.

Dr. H. G. Nicholson, of Charleston, was then unanimously elected Treasurer.

The following Councillors were then elected in due form: First District—H. P. Linsz, of Wheeling; Second District—C. H. Maxwell, of Morgantown; Third District—L. H. Forman, of Buckhannon; Fourth District—W. S. Link, of Parkersburg; Fifth District—E. H. Thompson, of Bluefield; Sixth District—J. W. Moore, of Charleston.

Dr. Jas. R. Bloss was then duly elected as Delegate to the A. M. A., for the years 1921 and 1922. Dr. W. W. Golden was elected Alternate for the same period.

Place of meeting for 1921 was then made the order of business.

Invitations were extended by Charleston and Pence Springs.

By a standing vote it was decided to meet at Pence Springs during the fourth week in May.

The report of the Workmen's Compensation Committee was then called and Dr. J. Ross Hunter, of Huntington, made a full report of what had been accomplished by the committee.

By motion his report was accepted with thanks and his recommendation that the president appoint a committee of one, who shall live in Charleston, to further carry on the work and look after the interests of the Association members in their relations to the Compensation Commissioner, was ordered adopted.

President Johnson duly appointed Dr. J. E. Cannaday as this committee.

The following resolution was then presented, read and adopted as read:

"Whereas, We, as members of the West Virginia Medical Association appreciate the urgent need of good road legislation in our state, and,

"Whereas, we believe that the medical profession can be of more service to the public if roads are passable at all times of the year, and

"Whereas, the creation of a state system of roads commends itself to this Association as most likely to hasten the improvement of the roads of this state,

"Therefore, Be It Resolved, that the West Virginia Medical Association endorse the resolution, submitting to the voters of this state the question of amending the state constitution to provide for the creation of a state system of roads and providing further for the construction thereof by the authorization to issue bonds, the outstanding amount of which shall not exceed $50,000,000."

A series of eight resolutions offered for consideration of the House of Delegates by the Legislative Committee of Ohio County Medical Society were then read by Secretary Anderson.

These resolutions were referred to the Committee on Public Policy and Legislation for their consideration and further action.

The Committee on President's Address was then called upon for its report and Dr. F. L. Hupp, chairman, responded with the following:

"The Committee on President's Address wish to pay the highest tribute to Dr. H. R. Johnson for the wisdom, thought, and understanding of this vitally important theme.

"We recommend for the endorsement of this Association the points so forcibly exhibited in this paper:

"First—The universal prevalence of drug addiction.

"Second—That this condition is to be dealt with as a disease and not as a vice.

"Third—The need of a better education of the profession, the laity, and the law makers.

"Fourth—That there should be a more zealous activity on the part of the De-Partment of Health in meeting this vital problem.

"Fifth—That drug addiction must be considered first, last and all the time a medical rather than a police or penalogical problem.

"Respectfully submitted,

"FRANK LEMOYNE HUPP,
Chairman,
"J. E. CANNADAY,
"G. D. JEFFERS."

The report of the Committee on Secretary's Report was then called and Chairman C. R. Ogden responded with the following:

"Your committee has studied the report of Secretary Anderson with much interest, and while there are facts in the report to cause some disappointment, there are others to give encouragement. It is to be regretted that the active membership for 1920 has fallen below that of 1919—a decrease of 52. Your committee feels that there is much in the suggestion of Dr. Anderson looking to the increase in membership and the general betterment of the Association that should be seriously considered and actively pursued. The suggestion is good that each member should do all in his power to increase the membership for 1921, so that at least we can be able to say that one-half of the practicing physicians in the state are members of the Association. The committee noted with a degree of disappointment that there are yet several counties in the state that have no organization.

"Your committee notices with a deep and genuine regret the report that since our last meeting ten of our fellow members have 'crossed the bar' but are cheered by the feeling that they are today realizing the promises of the Lowly Nazarene to them that follow in his ways. In the death of these ten noble physicians we are again reminded of the inevitable fate that awaits us all—'that paths of glory lead but to the grave.' While they have gone from us, like all true and noble physicians, they have left monuments more lasting than stone, more enduring than marble—the grateful affections of those to whose sick they have ministered and for whose children they have cared.

"Finally, your committee feels that this is the proper time and place for this Association to give expression of its sincere appreciation of the splendid and devoted service which our Secretary has rendered this organization; and the very high esteem in which this upright, true and faithful physician is regarded by every member of the West Virginia State Medical Association.

"Respectfully submitted,

"CHESTER R. OGDEN, *Chairman,*
"JOHN N. SIMPSON,
"GEO. D. JEFFERS."

The reports of the Committees on the President's Address and the Secretary's Report were officially received, adopted, the committees thanked and discharged.

President Johnson then made a few remarks of appreciation of efforts and successful accomplishments of all who assisted in preparing for and conducting the Fifty-third Annual Meeting, thanking them individually and collectively for the part they played.

The Secretary then proposed that a unanimous vote of thanks be officially expressed to the following for the very conspicuous part they played in the successful carrying on of the Parkersburg meeting: The Little Kanawha and Ohio Valley Medical Society, the Ladies' Auxiliary of above named organizations, the Elks of Parkersburg, Miss Gladys Kissell, who acted as registrar, the City Hospital, St. Joseph's Hospital, the Press of Parkersburg, the Hotel Management.

On motion of Frank LeMoyne Hupp the House of Delegates adjourned as a memorial to those of our number who passed the Great Divide since last we met.

Announcements and Communications

June 5, 1920.

To the Editor,
West Virginia Medical Journal,
Huntington, W. Va.

Sir:

On account of the large number of arsenic preparations which are being exploited for the treatment of syphilis, the United States Public Health Service has considered it desirable to issue a circular letter, copy of which is inclosed, discouraging the indiscriminate use of untried preparations.

Attention is especially invited to the fact that provision is made for the experimental use of any preparation under conditions which will make the results of such experiment available to others than the physician immediately concerned.

I shall be glad to have you give the circular letter and this letter of transmission publicity.

Very truly yours,
H. S. CUMMING,
Surgeon General.

USE OF ARSENIC PREPARATIONS IN TREATMENT OF SYPHILIS

Treasury Department
Bureau of the Public Health Service
Washington
May 12, 1920.

Bureau Circular Letter No. 219

Medical Officers, U. S. Public Health Service and others concerned:

Your attention is invited to the extensive exploitation through advertisements in professional journals and otherwise of various arsenic preparations which are not related to the arsphenamine group. The preparations referred to are sold with claims in regard to their value in the treatment of syphilis, which are unwarranted.

In the opinion of this office it is in the interest of all concerned that the subcutaneous, intramuscular or intravenous use of arsenic in the treatment of syphilis be confined to preparations of the arsphenamine group as these agents are of established value and are produced under the regulations of the Public Health Service. The following firms are now licensed for the manufacture of arsphenamine and neo-arsphenamine:

Dermatological Research Laboratories,
1720 Lombard Street,
Philadelphia, Pa.

H. A. Metz Laboratories,
122 Hudson Street,
New York, N. Y.

Diarsenol Co., Inc.,
Buffalo, N. Y.

Takamine Laboratories,
Clifton, N. J.

The Lowy Laboratory, of Newark, N. J., has been granted a license to prepare a stable solution of arsphenamine.

It is not the desire of the Bureau to limit clinicians in the choice of agents of recognized worth but in the case of arsenic preparations, not members of the arsphenamine group, the available evidence indicates that their routine use is inadvisable in the treatment of syphilis. If it is desired to use any of these preparations in a purely experimental way previous authority from the Bureau should be secured. Applications for this authority should be accompanied by a statement as to the composition of the drug including the structural formula and the reason for its use. All informa-

tion available on the value of the preparation should be forwarded.

Receipt of this circular should be acknowledged and marked "V. D. Division."

H. S. CUMMING,
Surgeon General.

SOUTH AMERICAN SURGEONS
(Continued from June Issue)

IV. SENOR JAVIER PRADO

We were afforded the pleasure of visiting Senor Prado at his palatial home, with its private museum containing antiquities of the ancient Peruvians and of the Incas of the pre-Peruvian age. Senor Prado is a son of a distinguished Peruvian who was President of the Republic at the time of the last war between Peru and Chile. He has gathered one of the most complete collections of ancient Peruvian pottery now in existence. Many rooms of his home are filled with unusually beautiful coco bolo and mahogany carvings. His art gallery contains some of the finest works of Peruvian painters. He has collected from France and Italy excellent bronzes, marbles, miniatures, cameos, and fans. One of the sleeping rooms is a marvel with carved furniture and cabinets of native coco bolo and mahogany, while the polished floors are covered with some of the most perfect Vicuna rugs that we saw in South America. From the windows one viewed the patio, which is a particularly artistic feature of this palace which is situated in a country where tropical gardens of great beauty are seen everywhere. An interesting room is one which contains many busts and the family portraits, a number of which are likenesses of his illustrious father in the gorgeous uniforms of his time with many decorations. Senor Prado is a most charming host, and he is extremely modest in exhibiting his treasures. One of the marvels of his collection is a room filled with the skulls of Inca chiefs, many of them having been distorted and reduced by cunningly devised pressure apparatus by these aborigines. The Senor's secretary brought two of these precious skulls to Dr. Mayo and myself at our hotel in Lima. These are mementos that we shall prize forever as reminders of an enjoyable visit to a most interesting man.

V. HONORARY FELLOWSHIPS

Honorary Fellowships in the Sociedad de Cirugia del Peru were conferred upon Dr. Mayo and myself, under interesting auspices. The ceremony occurred in the main lecture room or amphitheater of the Medical Department of the University of San Marcos. This university, by the way, was established just one hundred years before the founding of Harvard University, making it by far the oldest university on the two American continents.

We assembled in the main lecture room, on the large platform of which were the members of the Sociedad de Cirugia and of the Faculty of Medicine of the university. The President, Dr. Juvenal Denegri, occupied a seat at the center table, with Dr. Mayo and myself at either side. Flanking us were the members of the Faculty and of the society. On the main floor or amphitheater were about two hundred students. The back of the amphitheater opened onto a court filled with tropical plants, palms, and flowers. This could be seen through an attractive colonnade which outlined the assembly hall. The students, a splendid group of young fellows, were in their places when we entered and filed onto the platform. They rose in a body

and cheered and applauded for several minutes. It was a reception that was rather stirring, and warmed our hearts to the future medical profession of Peru.

The President, Dr. Juvenal Denegri, read an address of welcome to the two candidates for Honorary Fellowship. In the meantime, we had received copies of the English translation of the address. A second address was read by the Secretary of the Association, Dr. Francisco Grana. The Honorary Fellowships were then separately conferred by the President, and engraved parchment certificates presented to us as evidence of this honor.

As Dr. Mayo rose to speak, he received an ovation from the Faculty and students that plainly deeply touched him. It was some time before he was allowed to express his pent-up feelings and to say to them how much we appreciated their great hospitality and especially the honor they had just conferred upon us. He then described the object of our visit to South America. My own talk was received with an enthusiasm that I was at a loss to understand. In responding, the most I could do was to congratulate everybody on something: the splendid body of students for being educated in the oldest university on the Western Hemisphere, in a medical school with a seven-year course; the Faculty for being privileged to teach in the university, with such an attractive student body; Dr. Mayo and myself for being so fortunate as to be privileged to visit this institution and to receive such a reception. The brief talk was suddenly terminated and was followed by the most enthusiastic applause, too much for the conventional and rather commonplace talk. It occurred to me that there was some compensation in being brief and in speaking in an unknown tongue. It transpired, however, that these were not the reasons. It seems there has been quite a partisan controversy in the medical department over the length of the course, viz., the seven-year requirement for a medical degree. This had been discussed pro and con with considerable feeling, the students being divided into two factions, one opposing the long course and the other upholding it. In congratulating them on the seven-year course, I had used the sign language by holding up seven fingers to emphasize my speech. Each of the two groups to the controversy interpreted my remarks as favoring its contentions; hence the outbreak. As a matter of fact, Dr. Mayo and I soon found that our talks when brief and least understood were most heartily received.

VI. IMPORTANCE OF STANDPOINT

Dr. Mayo, as we all know, is the philosopher of practical surgery. We may not have thought of him as a philosopher-poet, but on a number of occasions on this remarkable trip of ours the claws of practicality were padded, and in the purple atmosphere of the southern continent the poet emerged. "In coming to South America," he said to the Secretary of State of Uruguay, "we have succeeded in changing our standpoint. In our northern continent we live under the polestar, and our whole view is from the standpoint of the northern heavens. Now we have visited and viewed for the first time the heavens of the southern cross, and with this experience our range of vision has been broadened and the expanse of our standpoint has been doubled. In the future, America will mean to us all-America, including that under the pole-star, and no less that under the southern cross."

VII. SURVIVAL OF THE FITTEST

How little do we know of the people of the southern continent! We were accustomed to thinking of them as the in-

habitants of a number of small republics which would compare in area to so many of the states of our own country. In our ignorance we considered them, of necessity, more or less provincial. Our idea is now changed. Instead of being provincial in their attitude toward life, we found the peoples of South America to be the broadest and most cosmopolitan in the world. And why shouldn't they be? The continent of South America, including the Central American states, was the first to be explored by European countries. Taking Peru as an example, review for a moment its history. It had an ancient civilization that antedated by several centuries the discovery of America. This race was overrun, and after a prolonged struggle it was conquered by armies of Spain, led by the most competent adventurers. With the subjugation of the Incas, the Europeans intermarried with this strong race of natives, and for four hundred years this melting-pot has been fed by the men and women of vision and adventure of Europe—England, France, Italy, Germany, and Holland—and from it has emerged a strong nation of self-reliant Peruvians, which represents the survival of the fittest of centuries of evolution.

And that is how they appear! They are of strong physique, self-reliant in attitude, their strength of character predominates, and they are ambitious for self-education; they are not satisfied to retain a local outlook; they are not as we are prone to be—selfish in our preparation for intercourse with the world; they, most of them, know and cultivate at least two continental languages besides their own; they seek a classical education at home and supplement this with world travel and study abroad; they are people of strong temperament and broad vision and they are interesting in their social intercourse with each other and with the strangers within their midst who are properly vouched for. And here, in a country that is a paradise of beauty, a wonderful people is pursuing its life, conscious of its worth, and with a world experience that compares favorably with the best of its continental confreres.

And what applies to Peru is equally true of Chile, Argentine, and Uruguay—similar experiences, similar conquests, similar European emigration, similar yearning for independence; fertile land, mountains that are filled with minerals, and climates that attract the lovers of life; these are the ingredients of a melting-pot that has evolved a new people in a new civilization that cannot longer remain unrevealed.

VIII. A DOUBLE CONQUEST OF PERU

From the Log, January 25. A day of rest after three strenuous days of business, pleasure, and interest in Peru. It is Sunday. The festivities are over and the guests have departed. It is in the small hours of the morning; the floors of the deserted halls are still covered with confetti; and the few guests remaining are talking over the triumphs of the party. Strenuous entertainment transpires so rapidly that one fails to grasp all of the thrills of it until he reviews it in retrospect. So with the visit to Peru. The three days spent there will become more and more interesting and important as time goes on. In talking it over, Dr. Mayo and I feel that we have been veritable Pizarros—Dr. Mayo the leader and the rest of us his lieutenants. We have brought down certain ideals and our object has been to reconquer Peru. Our victory is different from the old one in that those whom we came to conquer have outgeneraled their adversaries and conquered us.

(*To Be Continued in August Issue*)

The West Virginia Medical Journal

JAS. R. BLOSS, M. D., Editor
C. R. ENSLOW, M. D.
J. E. RADER, M. D. Assistant Editors

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All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: 804 Lincoln Place, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

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FIRST VICE-PRESIDENT — B. F. Shuttleworth, Clarksburg.

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TREASURER—H. G. Nicholson, Charleston.

DELEGATE TO A. M. A. FOR 1919-1920—C. R. Ogden, Clarksburg. Alternate, W. W. Golden, Elkins.

DELEGATES TO A. M. A. FOR 1920-1921—H. P. Linz, Wheeling. Alternate, J. E. Cannaday, Charleston.

COUNCIL

FIRST DISTRICT—H. P. Linz, Wheeling, one-year term; C. G. Morgan, Moundsville, two-year term.

SECOND DISTRICT—C. H. Maxwell, Morgantown, one-year term; J. C. Irons, Dartmoor, two-year term.

THIRD DISTRICT—L. H. Forman, Buckhannon, one-year term; C. R. Ogden, Clarksburg, two year-term.

FOURTH DISTRICT—J. E. Rader, Huntington, one-year term; G. D. Jeffers, Parkersburg, two-year term.

FIFTH DISTRICT—E. H. Thompson, Bluefield, one-year term; J. E. McDonald, Logan, two-year term.

SIXTH DISTRICT—Charles O'Grady, Charleston, one-year term; R. H. Dunn, Charleston, two-year term.

THE JOURNAL

There are times when the spirits of your editor reach a very low point. This is one of them. It seems that the members have such a detached interest in the publication of their official organ in any way other than a critical one.

Suggestions are always sought for and welcomed, together with deserved criticism. A number of times in the last four years the request has been made that news items be sent in by any of our members and that the County Secretaries send in reports of their meetings. It is not done. There are a few of the men who do send in these and our thanks are extended.

At the recent meeting a number came to us and asked why it was that the County Society reports and State News was so meager. It was explained that the Editor was not omnipotent and could not personally attend each local meeting; neither did he know that Dr. Jones was the father of a perfectly new son; nor that Dr. Smith was recently married; nor that Dr. Brown has moved his location. Each promised he would go

home and take some action to see that the reports of such matters of interest were furnished.

It has been a month since we got back home. To date we have received no communications. You will note that there are reports from but two societies of their meetings. And the State News is only what can be found in the daily papers which come to our notice and from the personal mention columns of other medical journals.

We have requested that Dr. Anderson furnish a list of the Secretaries of the various County Societies and it is intended to send a card to each one requesting some information as to their activities and the news of interest to the profession from their neighborhood. We shall see how much this will accomplish.

Please assist in this matter, Fellow Members, or if you will not then do not be critical of the pages of our Journal devoted to this particular section. If you do not aid in providing material then you are remiss in your duty to our organization and unfair to your editor in your criticisms.

DANGER AHEAD

Those of us who have been regularly in attendance at the annual meetings of our State Association have noted the enthusiasm displayed. This has been particularly marked in the last two or three years. It has been a matter of comment by those visiting us from older and larger state associations. They seem to be very much surprised that this is so.

There creeps in the fear that our enthusiasm is like the religion of some, it just lasts during the yearly assembly and is put aside as soon as home is reached to be brought out and burnished up a year later.

If there is anything at all of value in the organization of our profession it should be working three hundred and sixty-five days in the year. We should be alive to all influences which will have a bearing upon us, be they either scientific or material.

On numerous occasions attention has been called to matters which have seemed of great importance to us. At times there has been a feeling that possibly these pages have been more or less uninteresting if not actually irritating to some, because of the constant reiteration of dangerous conditions which are confronting us. Unless we, as a closely organized and ACTIVE body, take a hand in affairs political from now until next election we are going to find ourselves face to face with a number of matters pregnant with possibilities of great injury to legalized medicine.

The Committee on Medical Legislation is going to have to be very active during the coming session of the Legislature if our profession is not only going to be badly handicapped but to actually suffer because of unwise measures passed or wise ones unpassed.

No true physician wishes to have a law passed to protect our profession unless it is for the good of the whole citizenry of the Commonwealth. The time has passed, however, when we can feel that we should not take an active part in matters relating to our daily life along other lines than purely professional ones.

A clipping from the Wheeling Intelligencer has been sent to me. It is given below with the hope that it will awaken the profession, as represented in the State Association, to one of the problems that will confront our committee at Charleston next February.

You will note that the chiropractors are getting ready to have legislation that they may fight "quacks" in their own ranks. It is to laugh that thinking persons would even publish such statements in view of the columns of garbled truth and untruth which appear from time to time as paid advertising matter in the daily papers.

It seems to be an impossibility to get a prosecution of the "quacks" at present to say nothing of a conviction even when the chiropractors are not licensed and are practicing each day and carrying advertisements in the papers asking for patients.

The clipping is somewhat illuminating as to the plans of these unlicensed practitioners of the healing art who have the assurance to talk of "Quacks."

"DEMAND STATE RECOGNITION"

Chiropractors Will Ask Next Legislature to License Their Profession.

"When the next state legislature is elected and organized it will be asked to bring about the creation of a board of examiners authorized to license a class of professional practitioners never before officially recognized in this state. West Virginia's chiropractors have organized for the purpose of demanding official recognition at the hands of the state medical board and will press their claims until they win, say local leaders of this profession.

"Dr. Hector Lamont is the leader of this profession in Wheeling and was questioned by an Intelligencer reporter as to the intended request for a state board of examiners for his profession.

"Dr. Lamont admitted that plans have been mapped out for presenting claims to the state and said that suitable grounds will be laid before the legislature, to bring about the desired result.

"The position occupied by the chiropractors in West Virginia is a peculiar one. Although they are unlicensed they have a large clientele and it is known that they have obtained remarkable results, with those who give up faith in medicine, after long trials and disappointments. Frequently these men and women are summoned to hospitals to attend patients of medical men and because of the rather embarrassing situation thus created the chiropractors desire recognition at the hands of the state, proper examinations and certificates proving their qualifications. It is predicted that presentation of the demands of the chiropractors will result in interesting developments at Charleston.

"Dr. Lamont said that he and others had studied their profession and that fakers are now entering West Virginia representing themselves as graduate chiropractors. To guard against these alleged fakers the actual graduates in this profession want state aid."

THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF WEST VIRGINIA

Since we have been talking of matters legislative this seems a good time to take up this one too.

At the last annual meeting a very interesting address was given by our good friend, Dr. John N. Simpson, Dean of the Medical Department. In the course of his address he dwelt upon the great need of this department for the necessary appropriations to secure equipment, laboratory facilities, etc., to restore it to a class A school. The president appointed a committee to inquire into this mat-

ter and appear before the Legislature to insist upon adequate appropriations being made.

Next February the appropriations must be made for the University for the ensuing two years and this department should not be neglected. The suggestion is made that this committee begin at once to gather such information as may be secured that it may go before the Finance Committee of the Legislature with our recommendations.

Recently the Board of Regents of the University of Southern California suspended the Medical Department and gave their reasons for so doing. An editorial in the May issue of Southern California Practitioner in commenting upon this action states in part as follows:

"We believe that those who are controlling the educational standards of our medical colleges are doing great harm to the people of the United States. The graduates in medicine are now far smaller than they should be. The result is, that Osteopathy and others of that kind are taking possession of the cross roads, the smaller towns and are also getting a great foothold in our cities. Putting the value of Medical Colleges entirely on the basis of a dollar is doing away with individuality and personality."

There is no question but that the scarcity of physicians does exist and it will continue to become more acute. This is not so noticeable in the cities but is a very vital question in some rural districts. The state must take cognizance of this and promptly.

The opportunity should be provided to the young men and women of our state to take up the study of medicine by our University. Some plan by which this may be provided at a minimum expense should be devised. Personally the idea of West Virginia not providing her sons and daughters with the complete four-year course has always pricked my pride.

Then there was the question, during the discussion, as to the advisability of establishing this department in some one of the larger cities of the state. The theory being advanced that the clinical material would be so much more plentiful. The University should not be split up. Students going there for academic work would see the medical department and thus the best foundation be laid for future physicians. If our department is made Class A the clinical material will journey to it, never fear. Rochester, Minn., is a living example of this. Then the atmosphere of THE UNIVERSITY will give an Esprit de Corps. Is this not so? Mention your Alma Mater and see if the shoulders of your soul do not straighten.

Let us keep our Medical Department. Not only this but let us "go-to-it" and have a four-year course with a Class A school, at Morgantown.

What do the rest of you think? The forum is open.

COUNCILLORS, SECRETARIES AND FELLOW MEMBERS:

At Parkersburg we had a glorious meeting. While there we adopted the slogan: "One Thousand Members for 1920."

Since the meeting closed we have received a goodly number, bringing the enrollment up to 921. Let us get to work and go "over the top." Seventy-nine more members will do it. Less than three members for each Society. Some Societies have acquired every available man within their bounds, but others can gather in a half dozen or more. Let each member try to find a new one. Don't

forget—"One Thousand Members for 1920." Only seventy-nine more needed. Good luck and go to it.

Fraternally,

J. HOWARD ANDERSON,
Secretary.

State News

Dr. M. W. Glass, formerly located at Wellsburg, has moved to Beechbottom.

Dr. Everett Walker has changed his location from Rock Cave to Adrian.

Dr. E. A. Hildreth is now practicing at Charlottesville, Va., having moved there from Charles Town.

Married on June 16th, Miss Lillian Davis, of Huntington, and Dr. I. V. Peters, of Mayberry, at Huntington.

Married on June 16th, Miss Annie Cleveland Cone, of Richmond, and Dr. John M. Emmett, of Huntington, at Richmond, Va.

Born to Dr. and Mrs. C. McVea Buckner, of Huntington, on June 4, a daughter.

Dr. J. E. Mc. Chane, formerly of Williamson, has taken over the work at Tolland, since June 1.

Dr. J. Howard Anderson, of Marytown, attended the finals at Washington and Lee, his Alma Mater.

Dr. C. A. Farren, formerly located at Beury, has moved to McClung.

Married in Huntington in June, Miss Margaret Owens, of Ceredo, and Dr. Marshall Moore, of Ingram Branch, W. Va. They will live at the latter place.

It is with regret that we report the death of Dr. William A. Barnes, of Martinsburg, W. Va., in May.

Dr. L. V. Reynolds, of Eaton, Ohio, visited relatives in Huntington recently, enroute to Los Angeles, Cal., where he expects to locate permanently.

Dr. C. G. Roberson, of Hurricane, was injured fatally when his automobile overturned near that place. He died while being brought to the Huntington General Hospital. Dr. Roberson was a captain in the medical corps during the war.

Officers of the State Committee of Mental Hygiene were chosen in Charleston, June 17th, following a conference with Dr. V. V. Anderson, Medical Director of the National Committee for Mental Hygiene, who was there for a conference regarding the proposed survey of the feeble minded in West Virginia. Dr. Anderson was accompanied by S. Katz, of Pittsburgh, psychologist for the committee. Dr. L. V. Guthrie, Superintendent of the Huntington State Hospital, was made chairman, L. H. Putnam, of the State Board of Children's Guardian, executive secretary, and Mrs. Woodson T. Willis, of Charleston, vice chairman.

The Chesapeake and Ohio and the Huntington General Hospitals, of Huntington, held their commencement exercises together at the Carnegie Auditorium June twenty-fifth. The Huntington General having eight graduates and the Chesapeake and Ohio three.

At the annual meeting of the American Medico-Psychologic Association held in

Cleveland in June, Boston was selected as the next meeting place and the following officers were elected: President, Dr. Owen Copp, Philadelphia; Vice President, Dr. Sanger Brown, Chicago; Treasurer, Dr. Harry W. Mitchell, Warren, Pa.

Major General William C. Gorgas has been obliged to abandon his mission to West Africa where he was to investigate sanitary conditions. General Gorgas recently suffered a cerebral hemorrhage and his condition remains serious. He will probably return to the United States.

TUBERCULOSIS RESEARCH FELLOWSHIP

University of Minnesota

To encourage study of the means for the prevention and cure of tuberculosis, the Hennepin County Tuberculosis Association of Minneapolis, Minn., announces that it has set aside a fund for the support of a tuberculosis research fellowship in the Graduate School of the University of Minnesota. The candidate for the fellowship must be a graduate of a Class A medical college. He will be expected to devote himself to research in some problem concerned with the causes, prevention, or cure of tuberculosis. No teaching or other service will be required. The fellowship yields $750 the first year and progressively increasing amounts to be appropriated for the second and third years as conditions warrant. Inquiries and requests for application blanks should be addressed to the Dean of the Graduate College, University of Minnesota, Minneapolis, Minn.

Dr. James S. Klumpp, who received his degree of Doctor of Medicine and Surgery at the University of Michigan in June, will locate in Huntington, being connected with the Guthrie Hospital.

Dr. J. W. Skaggs, a graduate of John Hopkins University, will locate in Huntington.

Dr. C. M. Hawes, of Huntington, attended the finals of the University of Virginia of which he is a graduate, and also joined a party of friends at Dawn, Va., where he enjoyed a few days fishing.

Dr. C. A. Barlow, of Benwood, Major in the M. C., has received his honorable discharge from the army.

The West Virginia Board of Medical Examiners will hold an examination in Charleston, July 13. Dr. S. L. Jepson, Commissioner of Health, Secretary.

Dr. J. W. Ashby, of Carbon, has been honorably discharged from the service. He was a captain in the M. C.

Dr. Frank LeMoyne Hupp, of Wheeling, has gone to his summer home at Hulett's Landing, Lake George, N. Y.

Dr. C. W. Umbarger has moved from Sharples to Selbyville.

SEND IT IN

If you have a bit of news,
Send it in;
Or a joke that will amuse,
Send it in;
A story that is true,
And incident that's new,
We want to hear from you—
Send it in.
Never mind about the style,
If the news is worth the while,
It may help or cause a smile,
SEND IT IN!

—Kiwanis Magazine.

Society Proceedings

May 27th, 1920.

The regular meeting of the Cabell County Medical Society was called to order by the President at 8:30 p. m., at the Hotel Frederick. The Secretary read the minutes of the previous meeting, which were approved as read.

The program of the evening consisted of a symposium on Enteroptosis, the first paper of which was presented by Dr. W. E. Vest, who dealt with the medical aspect; the second by Dr. McKenzie, who dealt with the psychiatric aspect, and the third by Dr. R. J. Wilkinson, who took up the surgical side. All papers were well presented and enthusiastically received. The discussions were opened by Dr. L. V. Guthrie, who, with the aid of lantern slides of X-ray plates, gave an instructive discourse; all cases discussed having been patients of Dr. Guthrie. Following in the discussion were Drs. Bloss, Yost, Pepper, Vest, Wilkinson and McKenzie.

Dr. Vest moved that the Society invite Dr. Wm. Sharpe, of New York, to meet with us at the next meeting. The motion was seconded and carried.

The following motions were made and seconded:

1. That the President, Secretary and Treasurer get out incorporation papers for the Society.

2. That the committee for the investigation of illegal practitioners be thanked, and urged to continue their activities; that they hire an attorney at the expense of the society, and interview prospective candidates to the legislature regarding this issue.

The following motion was made, then withdrawn; viz: That members shall not affiliate with illegal practitioners, else charges will be preferred, and dismissal result; and that no candidate will be elected to membership who does affiliate with any illegal practitioner.

There being no further business the Society adjourned.

Number present 32.

F. C. HODGES,
Secretary.

June 10th, 1920.

The Cabell County Medical Society met at the Frederick hotel at 8:30 p. m. In the absence of the President and Vice President Dr. Bloss was called to the chair.

Drs. Swann and Emmett reported interesting clinical cases.

Drs. Wilkinson and Taylor expressed their favorable opinion of a central nurses register.

The motion was made by Dr. Taylor that the committee on nurses registration interview Mr. Ivan Davis and ask him to withdraw his register, that the Secretary prepare a circular letter saying that the society has gone on record as supporting a central nurses register, giving the phone number of same to each doctor and registered nurse. Motion carried.

Dr. Wilkinson moved that all members of the nurses' club be invited to meet with the Society at the next and last meeting of this season, and that a banquet be prepared. Motion carried.

Dr. Taylor moved that the Treasurer be requested to make a report at the next meeting. Motion carried.

There being no further business the meeting adjourned.

Number present 15.

F. C. HODGES,
Secretary.

The Mercer Medical Society met in the courthouse at Princeton, May 27th, at 8:00. Under clinical cases Dr. Thompson showed a case of hydroceplalous which was discussed by a number of the members present. Under the papers we fortunate to have with us Dr. C. C. Coleman, of Richmond, Va., who gave us a demonstration of lantern slides and lecture on nerve injuries, which was very beneficial and enjoyed by every member present. The society hopes to have Dr. Coleman return at some future date for another paper. Drs. Turner and Logan were up for membership and were elected to fellowship in the society. Dr. D. H. Thornton, of Princeton, was elected by acclamation. There being no further business the society adjourned to meet in Bluefield on June 24th. After adjourning we retired to the Princeton General Hospital where we were entertained with music and one of the most delightful luncheons of the season. The society is greatly indebted to Drs. Wallingford and staff for the hospitality and entertainment.

E. H. THOMPSON.

Surgery

TREATMENT OF POSTOPERATIVE ABDOMINAL PAINS

A. Schwartz (*Paris medical,* November 22, 1919) refers to the socalled "gas pains" occurring nearly always in patients who have been subjected to abdominal operations. In some cases the pain is so severe as to react on the general condition, causing increased pulse rate, nausea or vomiting, and an anxious facies. Schwartz maintains that "gas pains" can be completely arrested by the application of a large icebag over the abdomen, and reports three recent cases in which this result was obtained. In a fourth case, that of a young woman subjected to appendectomy for chronic appendicitis and to double plication of a dilated cecum, gas pains were wholly prevented by the application of an icebag on the second day. Gas was passed painlessly on that day and through the succeeding night, during which the patient slept soundly without a narcotic. The procedure recommended to obviate gas pains is to remove the dressing on the day after the operation, leaving only a thin compress over the suture line; a single thickness of gauze is then laid over the entire abdomen, next one thickness of chiffon taffeta, and finally a broad icebag covering the whole surface. The ice is renewed as soon as melted and the ice-bag kept on until the gas has been passed—generally for twenty-four hours. The skin should, of course, be watched, and a layer of flannel applied if required. Schwartz's explanation of the mode of action of the icebag is that after the initial stage of intestinal paralysis there occurs one of spasmodic contractions of the intestine, continuing until the gas begins to pass, or sometimes for a more or less prolonged period; the ice removes the spasm while allowing persistence of peristalsis and hence passage of the gas.

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THE DETERMINATION OF HEART DISEASE, THE DIAGNOSIS AND PROGNOSIS OF CERTAIN FORMS

By G. H. Barksdale, M. D.,
Charleston, W. Va.

Read at Fifty-third Annual Meeting, West Virginia Medical Association, Parkersburg, May, 1920.

All men who are interested in any degree in cardio-vascular work must have noted in the earlier days of their practice that time and again they have found cardiac murmurs and advised quiet, rest, etc., or else the patient would undoubtedly become a chronic invalid. He did not obey instructions and he did not become an invalid.

How many times each of us have seen a man, especially in dispensory work, who probably came in for dressings, and in routine examination was found to have a loud murmur? Every one was promptly called to hear this loud murmur and listen to his history, which often disclosed the fact that the man was a piano-mover or what-not. In either event the individual in question was unaware of his heart trouble. There is another very large group of patients who complain during exercise or excitement of pre-cordial pain, palpitation, giddiness, tremor and a great list of other symptoms. Yet, our cardio-vascular examination, as we do them in our offices, discloses nothing.

So it follows, that many of us become much confused concerning those findings which are necessary for a diagnosis of heart disease. And in speaking to a patient of heart disease, we must never lose sight of the fact that there is a vast and important distinction to be made between functional and organic disease, and the practical application rests on the important point: which is, Just when should we tell a patient he has heart disease? The line of procedure is clear, granting we have a proper diagnosis. I would dogmatically state: That no cardiac irregularity should be mentioned to a patient, unless he is in need of reassur-

ance and treatment for nervousness, or else treatment to increase the efficiency of a diseased heart.

Nothing in the practice of medicine is more amazing than the number of people who have been told that they have heart disease and yet they have neither feelings nor symptoms which in any way interfere with their work or play.

Meredith in the Boston Medical and Surgical Journal, describes having questioned two thousand young women and learned that one hundred and ninety-three had been told by physicians that they had heart trouble, usually valvular, and yet no single case of organic heart disease was found in this group. Sir James McKenzie has called attention to the folly of debarring men from military service on account of systolic murmurs in the absence of concomitant findings. During the late war, at least, in certain cantonments, approximately three percent of all recruits were rejected by the cardio-vascular board. The majority of these men carried a diagnosis of neuro-circulatory-asthenia, and yet Major Swan states that cases of functional cardiac disease should not be treated as cardiacs. The purpose of the foregoing is to emphasize the fact that a large number of perfectly able-bodied men are being daily rejected by life insurance companies, others made neurasthenics and otherwise unhappy on account of misinterpreted vardio-vascular findings.

Butler states that until one examines a few thousand presumably normal hearts, one has no idea of the abnormalities that may be found.

I do not mean to state that the functional cardiacs do not suffer, nor do I wish to criticise the cardio-vascular boards of the army, for the stress of military, and that of civil life, are very different matters. And an irritable heart may be perfectly fit for the duties of civil life and yet fail absolutely under the stress and strain of military life.

One of the features that is of most interest in cardio-vascular work is the beautiful mechanics of this system, and the falling of symptoms into definite groups on account of purely mechanical principles. The point that I wish to emphasize is that "If a diagnosis of cardio-vascular disease is made a certain group of physical findings must be demonstrated or else the diagnosis is not tenable. I recall an associate to whom I used to refer many cardiac cases. He would invariably, and very correctly, determine the size of the heart before he would listen. Much to my disgust he would at times send cases back to me without listening, saying emphatically that there was nothing of importance in the heart, because it was normal in size. I now appreciate that man more than I did at that time. He had an appreciation of cardiac mechanics. It has been stated that familiarity with the heart's mechanism in health and disease is a first essential, if the newer conceptions of cardio-vascular work are to be appreciated. Judging by present day standards those who do not possess this familiarity are incompetent to deal with cardiac patients. With the full assurance that the foregoing is true, I have chosen to take up in detail some of the most important findings and symptoms by which we arrive at a diagnosis of heart disease, discussing their relative importance and frequency of occurrence, purposely omiting the graphic methods which will be for all time work for the specialist.

Cabot emphasizes his approval of history taking in this fashion: "A diag-

nosis of myo-carditis is like a diagnosis of ulcer, it calls for an etiological qualification such as syphilis or tuberculosis." In his classification, he refers to the four common types of heart disease: The rheumatic, the syphilitic, arterio-sclerotic and nephritic. Out of a series of six hundred cases, ninety-three percent of this number fell into one of the four groups. Rheumatism being twice as frequent as any of the other as an etiological factor.

The great practical advantage of history taking is the inaugurating of scientific and rational treatment. Consider for a minute the great importance of removing all sources of infection to relieve rheumatism. Anti-syphilitic treatment to those with positive Wassermanns or conclusive syphilitic history. The great good being the avoiding of reinfection or redosing, as many cardiacs die, not mechanical or heart deaths, but infectious deaths by terminal, progressive or relapsing infection. Endocarditis is a complication in approximately fifty percent of all cases of acute rheumatic fever. The mitral, being by far the most frequently affected (96%). The liability to this complication diminishes as age advances and increases directly with the number of attacks. Chorea leaves organic disease in approximately fifty percent of all cases. This disease, however, does not produce a dangerous lesion, though the sclerotic changes that follow often lead to incompetency. Tonsilitis, by many considered a rheumatic infection, may be complicated by endo-carditis. There may be those who dissent from this, however, I believe that all internists agree that a cardiac should certainly be relieved of diseased tonsils as infection of serous membranes following tonsilitis is a common observation.

It has been stated that most cases of causeless aortic-regurgitation appearing in men between twenty and forty without rheumatic history have a positive Wassermann reaction and may be considered due to syphilitic aortitis with or without aneuryism, and correspondingly we find aortic disease vastly more frequent in those nationalities which are most heavily syphilized. From Worthin's Studies it appears wise to suspect that the heart is syphilitic in every patient showing good evidence of syphilis elsewhere. Aortic regurgitation and aneuryism with a syphilitic etiology make approximately twelve percent of hospital cases of heart disease. Arterio-sclerosis accounts for that large group of cases of weakened hearts in elderly persons with hardened peripheral arteries and hypertension, often with angina pectoris, occasionally with cerebral or periphral symptoms of the arterio-sclerotic type, and always with a negative Wassermann reaction.— (Cabot).

Osler refers to a group of cardiac symptoms associated with arterio-sclerosis where dilatation gets the better of hypertrophy. The patient presenting all the symptoms of cardiac insufficiency. Such a case coming under observation for the first time, the clinical picture is that of chronic valvular disease and the presence of a loud blowing murmur at the apex may throw the practitioner off his guard. Many cases end in this way though the dilatation was merely the incident which terminated the life of the individual who had suffered from some unrecognized disease. There is another group of cases of weakened and enlarged hearts apparently due to the hyper-tension of glomerulo nephritis. Such cases if gone into carefully give a history of distinct nephritic symptoms, and are

secondary to this condition. The histories of goitre hearts and congenital lesions I refer to, only to emphasize the point that either past or present incidences in the patient's history may persie make the diagnosis in doubtful cases.

From various writers, my teachers and from my own experiences I have culled the following dogmatic statements which I believe to be valuable. I pass them on to you; some you will criticise and some you will commend: All syphilitics, rheumatics and those with a pulse approximating 100 when at rest, should be considered as potential or actual cases of heart disease. The history of breathlessness should be considered of cardiac origin only when accompanied by general cyanosis, whether slight or extreme. Pain over the pre-cordium in a young adult is very rarely associated with actual cardiac disease, and should only be taken seriously when it repeatedly prevents exercise and is associated with hyperalgesia of the cardiac skin area. Patients presenting suspicious exophthalmic-goitre faces should be taken seriously, and carefully differentiated from N. C. A. and insipient tuberculosis. Remembering that a patient who persistently runs a pulse when at rest of 100 plus is to be considered as a cardiac.

The Surgeon General's Office has defined the normal heart as one with the apex impulse within the left nipple line and not below the fifth inter-space. I believe the size of the heart to be generally mistaken. The six-foot X-ray plate remains our most accurate means of determining the heart size. However, for practical purposes, Lewis states that the outermost point at which the apex beat lifts the palpitating finger as the sight of left cardiac border. Levan states that an appreciably increased dullness to the left of the sternum and a strong impulse beyond the nipple are the most satisfactory guides to enlargement of the heart. Cardiac hypertrophy never occurs primarily. It is a direct evidence of disease or disturbance of function in the cardio-vascular system. This point I wish to emphasize, and unlike a murmur or what-not, is never to be passed without an etiological qualification. The thrill in my judgment is one of the most unreliable of all physical findings. The whole matter resolves itself into one of definition. Osler says of the presystolic thrill terminating in the sharp, sudden shock: "This most characteristic of physical findings is pathognomonic of narrowing of the mitral orfice and is perhaps the only incidence in which the diagnosis of a valvular disease can be made by palpitation alone." Thomas Lewis, speaking of N. C. A., says: "All cases of presystolic thrills belong to an entirley group and are to be discharged from the army." Morris and Friedlander in a recent article on significance of presystolic thrills state: "That we have found many recruits presenting presystolic apical thrills with hearts normal in all other respects." They refer to a group of twenty-six men in which six had such thrills. This in my judgment bears out what I have said; namely: That a thrill except when most palpable is an uncertainty quantity. I, personally, rarely record this finding and advise all men, unless of larger experience than I, to record it only in the presence of substantiating findings.

The murmur is the finding, which with the majority of us, determines our opinion as to the presence or absence of cardiac disease, and it is not our fault, it comes from the handing of data from

one textbook to another without thought. It, to my mind, compares with such nuisances in the literature as the retention in the pharmacopeia of certain substances known as spikenard, cough-grass, etc. Babcock states: "The text of my paper: namely, 'That we are not to form our judgment of a case on the detection alone of a murmur, whether this be diastolic or systolic,' for a really intelligent opinion can be formed only by a study of the case in all its aspects." He further qualifies this by saying that a diastolic murmur in his opinion is always due to some structural defect.

The following comes from a report based on the study of one thousand cases under the direction of Lewis, to whom I have so often referred: "Ascultation is the least reliable method in sorting soldiers for cardio-vascular derangement. Of course, when a clear presystolic murmur is heard at the apex or a diastolic at the base associated with a water-hammer pulse, there is no question that the candidate is an organic lesion. Systolic murmurs, on the other hand, whether heard at the apex or the base, in the absence of other disqualifying signs, indicates valvular diseases only exceptionally. All workers, I believe, without reservations, agree that diastolic and presystolic murmurs are evidences of disease though it is suggested that in case of the latter, when doubtful, it probably is not presystolic in time. This is especially true when the murmur is brought out by exercise, as such sounds are very frequent in over acting hearts. Concerning systolic murmurs, will say without reservation, that such murmurs accompanied by findings as noted mean cardio-vascular disease. Systolic murmurs in aortic area when harsh and transmitted to the neck or associated with a thrill or with a weak aortic second. Loud systolic murmurs heard at apex and back if associated with hypertrophy or snappy first sound, or accentuated pulmonic second. Such a murmur, loud and harsh, heard over the upper left chest, front and back or associated with a thrill during quiet breathing as in congenital disease.

There are a few conditions in the practice of medicine more mysterious to the average man than the disturbances of rate and rhythm of the heart beat. I refer to tachycardia, bradycardia, extrasystoles, augicular, fibrillation, the syndrome of N. C. A. and allied conditions. They each, in turn, are deserving of earnest consideration and treatment, whether this be psychic or what-not. Simple palpitation or that state when the heart's action becomes susceptible to the individual, is per-sie harmless, though prolonged, rapid action may ultimately lead to hypertrophy. This type is familiar to all, it calmly settles down to a normal rate on rest and reassurance and occasionally responds in the same way to exercise. In either instance diversion is the potent factor. There is a similar group which do not respond to rest or reassurance and on very close examination give evidence of mild hyperthyroidism, that is, slight enlargement of the thyroid, slight tremor, and evidences of vaso motor instability, but no eye signs. The advanced hyperthyroids need no description, though I wish to add in passing, that we will never understand fully the vagueries of the thyroid secretion until we think of it as a quantative matter and do not expect all cases to be classic. The condition of paroxysismal tachycardia is definitely pathologic and is to be differentuated from simple palpitation by the history of past attacks of

tachycardia exceeding 140 per minute, of sudden onset and cessation, perfect rhythm and a heart usually free from demonstrable disease. Patients very rarely succumb to these attacks. A pulse rate of 50 or less suggests heart block, sufficient to say, such a rate if sustained means disease. Extrasystoles, generally speaking, are of slight consequence, as such they are not harmful, though frequently associated with a diseased myocardium. The point is, that they should not be dismissed without effort being made to determine the etiology. Auricular fibrillation means cardiac disease and when once established usually persists. The deficit can readily be ascertained by counting the pulse at the wrist while an assistant counts at the apex. This determination is of great importance in prognosis and in the administration of digitalis.

The subject of N. C. A. is such a large one and of such great importance that I feel that a discussion of this syndrome has no place in a paper of such limited scope, sufficient to say, this condition is generally considered purely a functional one and I only speak of it here to mention the treatment. The heart should be examined at infrequent intervals and in all respects the patient should be requested not to discuss his cardiac sensations, and the physician should purposely avoid so far as practicable all statements concerning the heart's action. They should never be treated as cardiacs, digitalis and rest have no place in the treatment. On the contrary, graduated exercises and reassurance are to be enjoined. The condition is not a new one, in any sense, and an enormous number of instable nervous people suffering from so-called over work nervous breakdowns, and what-not are in reality cases of N. C. A.

In this paper I have drawn freely from the writings of others, most especially from the valuable contributions of those who served on the cardio-vascular examining boards of the army. I wish to add that in my humble judgment, these men have done an incalculable amount towards placing cardio-vascular work on a sound and rational basis, and their achievement stand as one of the greatest in the medical records of the late war.

THE DREADED "SECOND SUMMER" OF NEGLECTED BABIES; A PLEA FOR PROPER FEEDING AND ENVIRONMENT

By ROBERT A. ASHWORTH

Read Before the Marshall County Medical Society, July 13, 1920.

The most neglected young species of living things in the world is the baby, and the most neglected baby is the second year baby. The first cause for this is ignorance, neglect and carelessness on the part of the parents, and the second is, because the child represents no value in dollars and cents; while the young of any of the lower animals, especially the thoroughbred animal, represents no small part of the owner's wealth.

The dangers of the "second summer" are mainly due to improper feeding, and can be prevented by proper management. The dreaded "second summer" robs many homes of a bright eyed, chattering, lovable babe, because of the ignorance or carelessness of the parents. The "second summer" properly approached need not be more dangerous than any other summer during the early years of a child's life.

All children as a rule are kept cleaner during the first year than the second or any other year, up to school age. This is accounted for because the child is kept in a basket, crib, bed, exerciser, swing or confined to a mat on floor of porch or in a room. During the first year the mother cannot place the blame on the baby for being dirty like she can after the first year, when the baby is a lively crawler or walker to the filth of the yard, barn, pig or chicken pen, garden or street. This filth, both indoors and outdoors, is often the excreta of the child itself, the cat, the dog, the older children or even the parents. In some homes the members of the family spit on the floor and often the cat, the dog are housed day and night, and less frequently, chickens, pigs and lambs are housed. This filth, some babies are brought up in; which is upon face, hands, head, body, clothes and beds, is a mixture of the obnoxious things to the senses of sight, taste, touch and which shocks the senses of decency and refinement, and sometimes this filth is patrolled as brazenly and with as much effrontery by the itch mite, the body louse or crab, but more frequently by the fly, bed bug, flea or head louse, as the secret service men would patrol a district inhabited by the lovers and followers of the "Red Flag." Frequently these children's noses have yellow streams flowing from them like the "rivers of water," in some cases caused by the neglect of the art of "blowing the nose" and cleanliness, and in other cases by enlarged tonsils, malformed noses and adenoids. This picture of the environments of the second year baby is not over drawn, but represents an extreme home of poverty, filth, dirt and laziness, and between the *many homes* of the bright eyed, clean, well dressed, fair skinned, properly fed, carefully cared for babies, there is every degree of uncleanliness, of neglect and improperly fed babies, with improper foods, improperly prepared and given at regular intervals.

In one home of our city, which has been visited by other members of this society and myself, house-cleaning, dish-washing and bed making is unknown and the washing of clothes is neglected to such an extent that there are no clean towels, clean sheets or even a clean rag for a thermometer. Sweeping is also unknown, the floors being covered with dirt and sputum and the dishes not washed but are on the table from meal to meal covered with flies. I do not know of but one home like this, I am glad to say, but there are many dirty, neglected homes in our midst. I do not wish to over draw this picture but I wish to make a plea for the second year baby of these neglected homes and arouse an interest in you and through you an interest in the public for these unfortunate babes, which are entitled, in our land of equal opportunity, to clean homes, good environments and proper food and feeding.

The laws of our state fines and imprisons the husband for neglecting to provide for his wife, why cannot we enact laws to compel the mother to nurse her child and keep it and her home clean? If our city ordinance can keep dogs and chickens off their neighbors' yards and gardens, why can we not have laws to keep bed bugs, lice, flies and the larvae of the intestinal worms off their own children? Which is the worst pests and which is the more valuable, the garden or the children? If we have laws to prevent cruelty to animals, why not have laws to prevent cruelty to children in the way of bad feeding and bad environ-

ments? If the state can offer money to the hunter for the head of a panther, wild cat or fox, why can it not give some suitable recognition to the doctor who will bring in the head, body and tail of the tubercular or syphilitic baccilli, which frequently infect children if this age? We have laws that will keep a man or a woman who has smallpox in quarantine, why can we not have laws that will keep a syphilitic man or woman in "blessed singleness?" The laws make some of our patients keep their back yards and alleys clean, why cannot the laws make some of our patients keep their children clean?

We have seen second and even third year children nursing the bottle, thumb or pacifier, sleeping with its face covered with dirt and flies. As examples of common errors in feeding I have seen a two year old child in the mining district of Southern West Virginia eating thick corn bread, made with baking powders and water, cooked too quickly and not brown enough, and colored beans for its breakfast, served cold at nine o'clock by one of the older children in the absence of the mother, who had gone to the store. I am inclined to believe that the older members of the same family had had a better breakfast served earlier and warm, and that the above meal served to the child was left over from the previous day. I was in a home last week, blessed with a second year babe, where the man works on "night turn," supper is served at five p. m. and the breakfast at eleven o'clock a. m., making eighteen hours between meals. In this case before breakfast the child was starved; over fed at this meal, the stomach over-distended with an attack of indigestion following as an inevitable result. We have all been in homes where, in the absence of the men, no cooking was done or in homes, in the presence of the men, where the cooking was done and the time of the meals served, for them instead of the second year child. If the family cannot have a separate dietary for the young children and the adults, it is better that the adults eat what is good for the children, than that the children should be forced to eat what the older members like. In many homes the child will get one meal, which is usually the breakfast, of proper food, well served, and the rest of the day it will be given coarse food, crackers, "a piece or a spread" at frequent irregular intervals which is enough to "upset" any adult stomach. When the child is weaned or given something other than a milk diet, it is customary to allow "tastes" from the table; very often the things given comprise the entire dietary of the adult. *Irregular feeding at any age of life is bad feeding and this should be emphasized the second year just as much as the first.* A child should be fed at regular intervals, even "to the minute," at the same time every day, with the proper kind of food to keep them from being so hungry and over-eating later. The wrong food once a day or once a week in some children will keep their stomachs "torn up."

Keeping the child on an exclusive milk diet later than the twelfth month is not an infrequent error, as a rule starch may be added at the seventh month in some form and should always be added as early as the ninth month. Sometimes the child's diet consists largely of milk and insufficiently cooked cereals from the twelfth month to the third year. Frequently crackers and milk, bread and milk, cakes and candies constitute the only articles of diet during this very important period of growth. The high

value of proteids which is very necessary at this age is overlooked. *Indiscriminate eating between meals of anything will surely be followed by indigestion and malnutrition.* If suitable food is given at a definite time and proper intervals a normal child will be hungry at feeding time. *Nothing should be given between meals except water.*

Emphasis should be laid on the frequency with which too coarse a food is given second year children. I am now treating two children, each one a year and a half old. One of them had eaten a cup full of raspberries given to it by the father; the other was allowed out in the yard where small, hard, sour green apples were on the ground. A child twenty-two months old in our own community last year ate "heartily and freely of home-made, home-canned sausage and beans" as his father expressed it, and died a few days later. A few years ago, in Moundsville, one of the same age ate two bananas and another ate nuts, and both died.

The second year child is frequently given such prohibited things as beans, fried potatoes, fried cabbage, taste of pickle, raw apples, berries and melons. Solid articles of diet when first added to the dietary are given too often and in too large amounts. They should be given in small quantities and gradually increased. The most frequent error in feeding that comes under my observation in feeding children of this age is the giving of sweets; this is the most frequent cause of disturbed nutrition, after the first year of life. All of our homes, even the best of them, err in this. Dunn, instructor in pediatrics, of the Harvard Medical School says: "Candy, even at meals, should never be given to infants in the second year—and that sugar should not be added to the diet at all." Kerley adds sugar, and I agree with him in this, but think that the only sweetening allowed should be in moderate amounts for the cereals, custard, corn starch, baked apples, apple sauce and the plain rice pudding, and that the child should be required to get the most of its sweets from milk, Zwieback, cereals and other forms of carbohydrates. Sugars, candies and cookies are so pleasing to the taste that the habit of eating them grows unconsciously and insidiously to such an extent that it is hard to keep in the bounds of moderation. The child well knows what it likes, it remembers these pleasant sensations of taste and by its having to a marked degree the grace of working its way into the feelings of the parents it usually gets what it wants and if it does not there arises a conflict in which the child wins by its persistence in bullying its parents into giving it what it wants.

These little patients usually have coated tongues, clay colored stools, prominent abdomens and complain of abdominal pain. This brings us to one of two typical types of different cases of feeding. In some children any sugar in the diet may be an excess and in other children no sugar may be given but the carbohydrate food may be in excess and cause this chronic form of indigestion. This type responds easily to treatment, the difficulty lies in making the diagnosis. All sugars and cereals in this class of cases should be cut out and other carbohydrates reduced; diet should be milk, beef juice, eggs, zweiback and bread, and for the appetite, tincture of Nux is useful. Other children which will give nearly all these clinical symptoms, are children who eat solid food and but little or no milk, and who eat between meals. The other type

is due to overfeeding to such an extent that the digestive powers is damaged so that malnutrition sets in. These symptoms are hard to recognize and difficult to treat. In the beginning there is no gain in weight, later there is loss of weight and loss of appetite, the patient becomes irritable, thin and the muscles flabby. Sometimes there is a chronic cough and slight fever, which would lead you to suspect tuberculosis. The stools are large, smooth, dry and of a sour, foul odor. The fat is not absorbed and the other foods not assimilated. The breaking point in digestion has now come on account of the high variety of diet and rich foods previously given. In these cases when you reduce the diet, the fever will leave, but your decrease in weight continues while the character of your stools improve. The restrictions of your diet will depend upon the severity of the symptoms and the character of the stools. In some cases only skimmed milk will be allowed. In all cases fats will have to be reduced, as well as the carbohydrates. In these cases frequent examinations of the stool should be made noting under the microscope if the fat globules are absorbed.

The under-fed babies of this age are the ones who have been kept too long at the breast or on the bottle, on an exclusive milk diet. These children become pale, thin and "flabby," with no gain in weight.

As an example of neglect let me mention, that I was in a home at night, recently, where there was a second year foreign baby sitting on the floor in the dark by itself, while the mother was visiting a neighbor woman, living in the next house. Another small girl was in the house on the bed, sick. The social nature of mankind begins to assert itself the second year, and the child should be entertained. It would be just as humane to banish a man on an uninhabited island or to put him in prison without anything to read or anything to work with, as it would be to deprive a child of any entertainment or toys.

Another form of neglect is in the time and hours of sleeping. During the second year a child should sleep twelve hours at night and one hour in the morning, till it is eighteen months of age, and all during the second year it should sleep from one and a half to two hours in the afternoon. A child should be put to bed for its "naps" at a regular hour in a quiet, darkened, well ventilated room. Regular sleep is a matter of habit, if begun right during the first year and not interrupted, it can be carried out without any trouble. When sleeping hours are disturbed or broken, the child becomes irritable, with bad habits and a mild form of indigestion follows. Sleep is important to promote growth during the age of childhood.

A proper dietary for a child during the second year, should consist of milk, zweiback, stale bread, cereal jellies, made of oats, barley or wheat; cereals, beef juice, broths, scraped beef, eggs, custard corn starch, plain rice pudding, orange juice, stewed prune pulp, apple sauce, bread and butter. *Milk should be the basis of an infant's diet throughout the second year.* Baked potatoes should not be given till after the twenty-first month. The first thing added to the diet should be two or three table spoonfuls of cereal jelly or zweiback and orange juice. The zweiback should first be soaked in milk and later given dry. The cereal jelly should be served with sugar, salt, or a combination of two of them. Then proteids may be added in the form of a

tablespoonful of scraped beef mixed with stale bread crumbs; mutton, chicken or beef broth with well cooked rice or stale bread and later plain rice pudding, custard corn starch, the pulp of stewed prunes, baked apples or apple sauce should be added. A soft boiled egg mixed with stale bread crumbs is a popular and valuable diet in the latter part of the second year on account of the ease with which it is prepared.

From the twelfth to the fifteenth month, five meals should be served daily at the following hours: 7, 9, 11 a. m., and at 3, 6 and 10 p. m. From the fifteenth to the twenty-fourth month four meals should be served daily, at 7, 11 a. m., and 3 and 6 p. m. During the whole year the juice of one orange may be given at 9 a. m.

If this paper has aroused, in a small measure, your interest in securing proper feeding and better environments for the "second year" babe, I will be repaid ten fold for the short time devoted to it.

TYPHOID FEVER FROM THE LABORATORY STANDPOINT

By K. D. GRAVES, M. D.,
Roanoke, Va.

Read Before the Mercer County Medical Society, February, 1920.

Although a great deal has been written about typhoid fever during the last few years, and a great deal has been accomplished toward its prevention, it still ranks about fifth on the list of mortality rates from infectious diseases in the United States, and costs this country about one hundred million dollars a year. Although a preventable disease, spread by factors most of which we appreciate, in many localities it is not taken very seriously, but is considered a necessary evil.

Because of the advantage gained for the patient and those associated with him, the importance of an early diagnosis of the disease has come to be almost universally recognized. Notwithstanding the fact that in many cases the physician has little or no difficulty in making a diagnosis, there are a number of cases in which it becomes necessary to have certain laboratory tests made in order to clear up the diagnosis. Of these, the ones most commonly used are, in the order named, the Widal, blood culture, stool and urine examination. A number of tests formerly used have fallen into disrepute, notably the diazo, methylene blue and ferric chloride reactions.

Probably the most important of all the tests is the blood culture. This is often positive as early as the third day of the disease; and, when the illness is caused by some other organism, giving the patient symptoms resembling early typhoid, such as streptococcus and pneumoccus septicemia, these organisms can often be isolated, thus clearing up the diagnosis. The appearance of the bacilli in the stools and urine often does not commence until the second or third week of the disease, at which time a diagnosis from the clinical symptoms has usually been made.

It is a well known fact that the Widal test probably leads to more embarrassment on the part of the laboratory worker, and dissatisfaction on the part of the clinician than any other routine laboratory procedure. This is caused by several factors; the patient may have previously had an undiagnosed case of typhoid fever, or may have received an

inoculation of typhoid vaccine, either of which might cause the presence of typhoid agglutinins in the blood and a positive Widal reaction, regardless of the symptoms shown during the present illness, or on the other hand, a negative report might be had in the presence of clinical symptoms of typhoid fever, as a positive Widal reaction often does not appear until fairly late in the course of the disease.

In 1915 Dreyer of England worked out a modification of the Widal test, which is now in use both in the British and the United States army. This consists of a series of titrations of the agglutination strength of blood serum for a culture of typhoid bacilli of known destiny. Two or more of these titrations are made, from five to seven days apart. Although a rise of 100% is not significant, if the observations show a marked rise of agglutinins in the blood it is safe to assume that this rise is caused by only one thing, the typhoid bacillus, either dead in the form of typhoid vaccine, or alive, as the invading organism. If it is known that the patient has not received the vaccine while under observation, it is safe to make a positive diagnosis of typhoid fever. The time at which the maximum titre is reached falls between the 16th and 24th day of the disease. If, in the test, the maximum appears to be reached sooner than this, it is probably because of erroneous information as to the date of onset of the disease. If, two titrations of blood taken on different dates show the same result, they indicate, not that the agglutination strength is at a standstill, but that it has reached its maximum and is on the decline. The remarks made about typhoid apply also to Para-A and B Typhoid, although the time taken for the agglutination titre to reach its maximum is probably shorter in these diseases.

To illustrate the value of the Dreyer test, I wish to mention two cases:

F. L., Clinical diagnosis typhoid fever. On the 5th day of the disease the blood culture, stool and urine were negative for typhoid. The agglutination titre was 1-225. On the 12th day of the disease the blood culture, stool and urine were again negative for typhoid, but the agglutination titre was 1-1600. At this time we made a positive diagnosis of typhoid fever. At the end of the third week we obtained a positive blood culture, isolating the typhoid bacilli from the blood stream.

J. S., Clinical diagnosis typhoid. On the 4th day of the disease blood culture was negative for typhoid; agglutination titre 1-80. On the 9th day of blood culture, stool and urine were negative; agglutination titre 1-640. A positive diagnosis was made. Shortly after this the patient suffered from a typhoid intestinal perforation which was operated upon; and ran a typical course of typhoid to recovery, although we were unable at any time to obtain the typhoid bacilli.

It will readily be seen that, just as the Dreyer test is of value in diagnosing typhoid, it is also of value in ruling out other diseases of pyogenic character which may resemble typhoid; since, if a rise of agglutinins does not appear between the second and third week of the disease at the latest, the physician may feel practically certain that he is not dealing with a case of typhoid.

CONCLUSIONS

1. That such tests as the diazo, methylene blue and ferric chloride tests are practically useless, because of their lack of specificity.

2. That of the laboratory tests, the ones of chief value to the clinician are, in the order named, the blood culture, the Dreyer test, and stool and urine examinations for typhoid bacilli.

3. That the simple Widal reaction is of very little value to the clinician.

PROCEEDINGS OF COUNCIL

Parkersburg Meeting, May, 1920.

The Council was called to order Tuesday evening, May 18th, at 9:40 o'clock, by Chairman Geo. D. Jeffers. Councilmen Jeffers, Johnson, Linsz, Morgan, Maxwell, Thompson, Dunn, Irons and Anderson being present, the minutes of the last meeting were read and approved as read.

Chairman Jeffers then called upon reports from all of the Councillor Districts. From the First District Councillors Linsz and Morgan in turn responded, telling how they had divided up the district and in response to letters from Secretary Anderson had gotten in touch with all the Component Societies in their District and had stimulated the interest.

Councillors Maxwell and Irons both responded, giving able outlines of the progress and condition of the Component Societies in their Second District. Neither one of the Councillors of the Third District were able to be present at this meeting but Councillor Ogden in his usual thoughtful and thorough manner had written a report and placed it in the hands of Chairman Jeffers to be read at the meeting. He and Councillor Forman had gotten in touch with all the Component Societies, found some in very good condition and were taking steps to rejuvenate those that were lagging. Chairman Jeffers made the report for the Fourth District. He was able to report that almost all available material in his end of the District had been brought into the Association.

Councillor E. H. Thompson made the report for the Fifth District, showing it to be in a thriving condition. He intimated that in the near future a new Component Society may be organized in Wyoming County.

The Sixth District was represented by Councillor Dunn. He declared that things were progressing well in his District.

These reports were unusually thorough and showed more interest and work upon the parts of the Councillors than had been shown for some time.

Chairman Jeffers thanked the Councillors individually and collectively for their good reports and the able work they had been doing.

Chairman Jeffers then called upon Dr. Linsz, chairman of the Medical Defense Committee. He responded, giving an outline of the seven suits in which the committee were or had been assisting.

Dr. Linsz then read a series of resolutions offered by the resolution committee of Ohio County Medical Society for approval of the State Association. Another resolution calling upon the Legislature to take vigorous action in the establishment of good roads throughout the state was handed to Secretary Anderson and the same was read.

By motion duly made, seconded, and carried both of these resolutions were referred to the House of Delegates.

Council then adjourned.

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The Council was called to order by Chairman Jeffers at 8:15 p. m., May

19th—Drs. Johnson, Jeffers, Maxwell, Thompson, O'Grady, Morgan, Ogden, Irons, Dunn, Linsz and Anderson being present.

The minutes of the preceding meeting were read and approved as read.

Drs. Thompson and Maxwell were appointed to audit the books of Editor Bloss. And Drs. Ogden and Morgan were likewise appointed to audit the books of Treasurer Nicholson. These committees retired and proceeded with their respective tasks.

On motion duly made by Dr. Linsz and seconded by Dr. O'Grady, and carried, Dr. J. R. Bloss was reappointed as Editor of the Journal for the ensuing year, and the salaries of Editor, Treasurer and Secretary for the year 1921 were fixed at the same figures as for 1920.

A vote of thanks was then extended to the officers for their faithful service during the past year.

Dr. Linsz then made a further report on the Medical Defense situation and recommended for the approval of the Council that the specific sum of $400.00 be applied in the Hoffman case. This recommendation was approved by a motion made by O'Grady, seconded by Dunn, and carried.

Dr. Thompson, chairman of committee on the audit of Editor Bloss' books was then recognized by the Chair and he reported that the books and all accounts were found correct. This report was then duly accepted with approval and the committee discharged with thanks.

Dr. Ogden, chairman of the committee on audit of Treasurer Nicholson's books, then presented his report. He stated that the committee found the Treasurer's report and accounts to be correct in every detail and recommended the approval of Council to the same. This recommendation was approved in due form and the committee discharged with thanks.

The attention of Council was then called to the fact that there had been several complaints made with reference to the West Virginia State Medical Journal. By motion duly made, second, and carried the Chairman was instructed to appoint a committee of three to look into these complaints and to take them up with Editor Bloss. Chairman Jeffers then appointed Drs. Linsz, Ogden and O'Grady to officiate in this capacity.

A message of greeting and regret because of his own unavoidable absence was received from Dr. Rader. This mesmessage was gratefully received and a suitable reply authorized.

By motion of Dr. Irons, seconded by Dr. Linsz, and duly carried the Chair was instructed to appoint a committee of three, who, by letters and articles in The Journal, should bring before the Association the importance of the prompt payment of dues by the members during the first three months of the year in order that all dues might be in the hands of the State Secretary on or before April first of each year.

Chairman Jeffers appointed on this committee Drs. Irons, Morgan and Bloss.

Council then adjourned.

PROCEEDINGS OF SCIENTIFIC SESSION

Parkersburg,, W. Va.,
May, 1920.

The Fifty-third Annual Session of the West Virginia State Medical Association was called to order by President H. R.

Johnson, M. D., in the auditorium of the Elks' Home in the historic city of Parkersburg on Thursday morning, May 18th, 1920, at 9:30 o'clock.

The Assembly was asked to rise and sing the first stanza of America, after which the invocation was pronounced by the Rev. Gill I. Wilson, of Parkersburg.

Judge L. N. Tavenner was then introduced, who in a most eloquent manner welcomed the Association to Parkersburg on behalf of the entire bailiwick of the Little Kanawha and Ohio Valley Medical Society. He suggested that he may have been chosen for this most pleasant task because of the bond of affinity which seems to exist between lawyers and physicians: Both are ignored until some one gets into trouble and then both are made a dumping ground for the burden of people's troubles. He then spoke of the close relation of the physician to mankind. They usher it into the world and usher it out. They save lives, heal mankind, or alleviate suffering by surgical and medical skill and by the perfecting of sanitation. He then spoke of the boundless resources of the section which welcomed the Association. He declared that it possessed a climate suitable for the raising of all varieties of vegetation, of animals, and best of all—men, women, educational institutions and doctors. To this historic and wonderful section he bid us welcome.

Dr. H. M. Campbell then extended a hearty welcome on behalf of the L. K. & O. V. Medical Society. He said such gatherings developed tolerance and fraternalism amongst the profession throughout the state. He pointed out the good to be derived from assembly, personal touch and contact. He declared that united effort accomplishes greatest good and that this is the object of the Association. He insisted that not only was the latch string hanging out but that the doors were wide open. And that the Little Kanawha and Ohio Valley Medical Society extended a whole souled welcome.

Dr. Charles O'Grady then in a most pleasing manner responded on behalf of the Association.

President Johnson then introduced William S. Robertson, M. D., of Charleston, who opened the Scientific Section by a most able paper on "Diagnosis and Treatment of Early Syphilis." The burden of his message was the necessity of early diagnosis in order that early and vigorous treatment may be administered and thus insure early and complete recovery. He suggested three important aids and guides to diagnosis and treatment: (1) The dark field microscope (2) The complete fixation test of the blood, (3) The complete fixation test, the cell count, and the test for excess globulin of the spinal fluid. He laid special stress upon the possibility of diagnosis from the initial lesion by dark field method before the blood tests are possible. As to treatment he employs the anti-syphilitic triad — mercury, arsenic and iodin. He believes in a wise combination of all three to suit the case and does not advocate any one to the exclusion of others. He thinks arsenic the most rapid and efficient in early diagnosis and immediate treatment. He administers these drugs as seems best in the given case. Arsenic by intra-venous or inter-spinous route, and even per rectum. Mercury by mouth, intra muscularly skin. In conclusion he places stress upon:

First—A positive diagnosis may be made with the dark field before the infection is generalized.

Second — Prognosis is immeasurably improved if treatment is begun before the system is swarming with treponema.

Third—Additional treatment is controlled by repeated examination of both blood and spinal fluid.

Fourth—Only repeated negative findings of blood and spinal fluid and absence of clinical evidence warrants the discharge of patient.

Dr. F. C. Hodges, of Huntington, then presented a masterly talk on "The Serology of Syphilis in Relation to its Pathology." He stated that there are no proofs of syphilitic antibodies. Consequently direct tests for these antibodies cannot be made by serologic examination. However in cases of syphilis there is a large amount of a substance normally present in small amounts, if at all, thrown out into the body fluids. In the presence of antigen this substance binds large amounts of complement. This substance is not found during the first two weeks or even until later hence for early diagnosis the dark field method should be used. He pointed out that there are two varieties of spiroceta pallida—the dermotrope with especial affinity for the skin and the neurotrope with especial affinity for the nerve tissue. The latter sometimes fails to give secondary symptoms. He then gave the findings in the secondary stage and in the tertiary stage. He feels that Wassermann is very reliable in the former. He states that in the presence of syphilis we may find negative Wassermann in early syphilis, in malignant and very ill syphilitics, in untreated syphilis where patients' resistance is sufficient to suppress the disease, and in syphilitics who have received enough treatment to suppress the disease temporarily. In cases where syphilis is suspected and Wassermann is negative he advocates a prevocative dose of arsophenamine.

However valuable as Wassermann test is he advises all tests.

These papers were then open for discussion and Dr. Barksdale, of Charleston, opened the discussion by dwelling upon the selectivity of certain tissues by infective elements and the specific virtues of the Wassermann reaction.

Dr. Barker, of Parkersburg, reaffirmed the necessity of early diagnosis and the importance of the dark field test in making this diagnosis before other tests can yield positive returns. He approved of the provocative dose of Salvarsan.

Dr. Ogden, of Clarksburg, laid stress on the importance of Lumbar Puncture and cited cases which were not recognized until this was done.

Dr. Henry suggested that Wassermann be made in all cases of premature labor and thus prove or exclude syphilis as the cause.

Dr. Vest, of Huntington, advanced the slogan—"When in doubt, do a Wassermann." He said it was of great value in clearing up the cause of trouble in fractures which are not doing well and also in cases of obscure stomach trouble.

Dr. Arkin, oof Morgantown, stated that in spite of the fact that the spirochaeta sometimes seemed to become drug fast and thus cases not respond to arsenic treatment that the failure might be due entirely to the fact that large enough doses were not given.

Dr. Bloss, of Huntington, advised not to take any one's word that he did not have syphilis. While he accepted the fact that there were two types of the spiroceta, yet he thought that the nerv-

ous type was not more resistant but simply more inaccessible. When patient does not respond to treatment abandon arsenic and mercury for a time and use iodides and then return to the arsenic and mercury later.

Dr. Williams, of Washington, D. C., then stated:

First—Any statement that nervous system is more resistant to treatment is fallaceous.

Second—Syphilis is a disease of connective tissue, lymphatics, and blood vessels, not of brain or other nervous tissue.

Third—Nervous system effected by syphilis, treated early does well. Taken late does badly because of the destruction of nervous tissue. You may cure the syphilis but you have damaged brain or cord tissue left.

Fourth—In considering arsenic fast spiroceta there are two factors: The resistance of the host and the walling up of the germ. Mercury and iodide are destroyers of gummata because of the latter's resistance by reason of obliterative endarteritis. Mercury and iodides break down this protecting wall. Spinal syphilis as a thing apart is a fallacy. Simply syphilis of deeper tissues. Give Salvarsan by the blood combined with mercury and iodides and results are just as good as by spinal canal. Avoid lumbar puncture whenever possible.

Dr. Robertson then closed the discussion by stating that there was no neurosyphilis perse. That he did spinal puncture in every case. That he drained spinal fluid when there were pressure symptoms and that in doing so patients temporarily improved and were more comfortable. He felt that the action of arsenic was bichemical, aided by tissues and laboratory of the body and that it may not be active in vitro.

Dr. Hodges closed by simply stating that he did not think the Hecht test sufficient in itself but an excellent check and should be itself checked with other tests.

Dr. Walter E. Vest, of Huntington, was then introduced and gave a most concise and able talk on "A Simplified Technic for Widal's Test." He advised taking a solution of 24 hour culture typhoid bacilli of strength of 10 billion to a Cu. Cm. A fresh blood smear. Drop one drop of 10 Bil. typhoid solution on this slide while the blood was still wet and an immediate agglutination showed a positive test. He gave a concrete demonstration, showing how easy and simple it is when you have the proper solution at hand. He used a solution in formaldehyde to insure safety.

The Association then adjourned until afternoon.

The Association reconvened at 1:45 p. m. and the program was opened by a most carefully prepared and illuminating paper on "Medical Education," by Dr. Jno. N. Simpson, Dean of the Medical School of West Virginia State University.

He gave a detailed history of Medical Education in the State. He then pointed out the absolute justice in the State furnishing its citizens with equal facilities in Medicine as along other lines of education.

He showed the necessity of a new building, enlarged faculty, complete medical library, establishment of a four year course, and suitable hospital facilities. He called attention to the great dearth of physicians in our rural districts

as an impending calamity if not a present one. His remedy suggested is to place medical school facilities within financial reach of the rural youth of the state. He pointed out what had been done for the Law and Sciences and pleaded for equal support for Medicine.

Dr. Churchman, of Charleston, opened the discussion of this paper by calling to attention the fact that the West Virginia State University Medical School was in danger of being dropped from the Association of Medical Colleges because of its poor equipment.

Dr. Judy, of Belleville, pointed out the necessity of educating the country boys in medicine because city boys when they obtain their degrees will not take up rural practice.

Dr. Williams declared the location of a Medical School in a large city not necessary. The quality of teaching and of clinical material more essential than the quantity.

Dr. Guthrie, of Huntington, stated we had ample clinical material in the state which could be diverted to our institution no difference where located.

The discussion was brought to a close by a motion that we recommend to the House of Delegates that the President be authorized to appoint a committee of five who shall present to the State Legislature an appeal on behalf of the State Medical Association for an appropriation sufficient to establish a first class medical school in West Virginia. The motion was unanimously carried.

Dr. G. H. Barksdale, of Charleston, then presented a most excellent paper on "The Determination of Heart Disease, the Diagnosis and Prognosis of Certain Forms." He placed stress on the fact that a heart murmur in itself is not evidence of serious heart trouble, and the necessity of considering cardiac mechanism. He advised that cardiac irregularity should not be mentioned to a patient unless he is in need of reassurance or of treatment to increase the efficiency of a diseased heart. He gave the following types of heart diseases: First, rheumatic; second, syphilitic; third, arterio-sclerotic; fourth, kidney or glomerular. He summarized by stating that: First, diagnosis of heart disease is made with too great lightness, often handicapping the patient; second, symptoms fall in definite groups or syndromes; third, history taking most important; fourth, murmurs most inconstant and unreliable; fifth, functional cardiacs are not heart disease, properly speaking.

Dr. Shawkey, of Charleston, in discussing the paper, called attention to the importance of treating tiny murmurs of children suffering with infectious diseases by rest in bed. And laid stress upon the removal of sources of infection such as tonsils, bad teeth, etc.

Dr. W. W. Brown, of Shenandoah Junction, then gave a most humorous and entertaining paper on "Microbe and Men." He classed them as good, bad, sad and glad. He said he wanted to speak of bad microbes and good men. He alluded to Holy Writ, called to mind the scourge influenza, touched on politics and altogether delighted his hearers.

Dr. C. H. Maxwell, of Morgantown, was next on the program with an able production entitled "A Thousand Babies." The theme that ran through his paper was the importance of obstetrical work and the apparent lack of serious consideration it receives at the hands of the profession.

He pointed out that many ills of mothers and children are traceable to

child birth and that failure to give proper attention to this work contributes much to the sum total of preventable diseases. He extolled cleanliness and condemned the fallacy of the old slogan, "Hands off." He condemns haste, approves chloroform or ether and abdominal binders. He then closed with a most complete tabulated list of the thousand babies he helped bring into the world with many interesting incidents and sidelights on his wonderful experiences in this field of labor.

This excellent paper called forth much discussion and favorable comment.

The next paper was a most interesting one on "Mythomania or Pathological Mendacity," by Dr. Tom A. Williams, of Washington, D. C. He classified the various types of lies as: 1. Suggested Falsehoods; 2. Malicious Falsehoods or False Accusations; 3. Careless Falsehoods; 4. Malingering Falsehoods. He took up each of these types and gave many interesting case illustrations.

The closing paper of the day was a masterly production by Dr. L. V. Guthrie of Huntington, on "The Maniac Depressive Psychoses." He took up this malady in a most thorough manner, pointing out that although little is known about the etiology and pathology, yet holding out hope that it may soon be shown that an endogenous toxin is probably the causative factor. In the institution of which he is superintendent he is trying to carry out some original research work along the line of Biological Chemistry which may give additional and valuable light on the subject.

The afternoon session then adjourned.

The evening session was called to order by Vice President Vest at 8:15 o'clock. The first feature of the program was the address of President H. R. Johnson. He chose as his subject "Drug Addiction." He treated the subject under three heads: 1. The adict. 2. The Medical Profession. 3. The Law. He regards the addict as a patient with a definite disease. He feels that the medical profession should be more thoroughly taught that drug addiction is a disease, not a vice, and needs specific remedies. He expresses the opinion that laws governing the subject should be made by those fully understanding the status of the addict and the underlying conditions and be so framed as not to defeat the object for which they are intended. Therefore he recommends that a state commission, 50% of whom should be medical men, be created to study the matter in scientific manner and, after considering the true pathological condition of the victims and the scientific methods of treatment recommend such legislation as will conform to their findings and conclusions.

Next on the program came the Oration on Surgery. Dr. Charles M. Scott being unavoidably absent sent his paper on "Strangulated Hernia," which was read before the Association by Secretary Anderson.

Dr. R. W. Fisher, the Orator on Medicine, being absent, Dr. Paul B. Johnson, Director of the Red Cross in the Field of Health for the Potomac Division was introduced. He opened his talk by calling attention to the recent great awakening in this country with regards to Public Health questions and the advances in Preventive Medicine which strikes at the very fountain head of disease. He attributes this awakening to three factors: 1. The Path Finding work done along these lines by old established institutions and organizations such as the State

Health Boards and The Society for the Prevention of Tuberculosis, etc. 2. The recent disclosures made by the Conscription examinations for the late war. 3. The passing back into civil life of 4,000,000 service men, who have had some training and instruction along the lines of Preventive Medicine. He then pointed out the wonderful service rendered by the Red Cross during the war and the magnitude of its growth. He made a plea that the Red Cross be given a trial in the field of Preventive Medicine before scrapping the excellent organization built up during the war. He then outlined the Peace Program of the Red Cross as follows: 1. Fulfilment of obligations it assumed towards the men in the service. Namely, looking after the T. B. soldiers, those disabled, and those in institutions and finding out the home conditions to which they return. 2. Disaster Relief in America and abroad, such as floods and tornadoes. 3. Red Cross Public Health Nursing. 4. Junior Membership: Interesting children in work for children and such incidents as the "Fly Campaign." 5. First Aid Instruction in all industrial centers. 6. Department of Health Service in co-operation with State Health and Private Health Organizations, including campaign of education along health lines.

The Hon. Arthur Kuntz being present, he was called upon to give a talk on Red Cross work in Poland. He stated that he felt that the great power and privileges given and the respect shown and retained by the American Red Cross in its work abroad aided much in placing America in the exalted position it now occupies abroad.

After a vote of thanks to Dr. Johnson and the Red Cross for sending him to the Association the evening session adjourned.

The Wednesday morning session began at 9:12 a. m., and was opened by a most thorough review of the history, etiology, pathology, diagnosis, prognosis and treatment of Rat Bite Fever by Dr. A. Arkin, of Morgantown.

Dr. Moore discussed this paper and laid stress upon the fact that nitric acid applied by means of a glass rod was the best method of treating animal bites. He made brief sketch of the difference between Trench Fever and Rat Bite Fever, claiming that Trench Fever was more after the type of influenza. He spoke of the skin manifestations as rather a macular rash—peculiar red and blue discoloration radiating around indurated areas which only partially disappears upon pressure.

We had hoped to have Dr. Arkins' paper in full for publication in the Journal, but he only turned over to our keeping a case report of Rat Bite Fever.

The next paper presented was a most excellent historical sketch of "Influenza —Past and Present," by Dr. H. E. Gaynor, Parkersburg. He traced it from about 411 B. C. to the present day. He claimed that it seemed to be endemic to the plateaus of Asia and that all epidemics seemed to eminate from that sec-

tion. He spoke of the efforts of the American Red Cross to stamp it out in its lair.

Dr. Arkin, Morgantown, discussed this paper, placing stress upon the necessity of solving this World Problem by eradicating it in its Endemic Home.

Dr. J. W. Moore, of Charleston, then gave an interesting paper on "Some Points in the Physical Examination for Pulmonary Tuberculosis." He pointed out the difficulty of making a correct diagnosis in every case of Pulmonary Tuberculosis, but laid stress upon the fact that it is possible, in a very short time, to determine whether Tuberculosis is to be considered or excluded in every case coming to a physician for treatment and he thinks this should be done. In making this exclusion diagnosis he thinks that for all practical purposes it can be done by auscultation alone. He classes all cases as: 1. Active. 2. Chronic Active. 3. Chronic Inactive. And pointed out the different diagnostic features of each of these classes and the line of treatment which should be followed in each.

Dr. E. E. Clovis, of Terra Alta, opened the discussion of this paper and while acknowledging the importance of auscultation pointed out the great importance of inspection, palpatation, percussion and temperature—the latter especially in relation to exercise.

"Infant Foods and Infant Feeding" was then presented to the assembly by Dr. Arthur A. Shawkey, of Charleston. He pointed out the fact that too often overlooked that infant feeding plays a very large part in the after and even adult life of an individual. He claimed that as a general principle every woman can nurse her own baby. That the lips of an infant in the process of sucking is the best stimulant to the secretion of milk. That infants have been placed back upon a mother's breast after a period of 20 months withdrawal. That the influence of infant feeding cannot be determined until after an individual is 30 years old. He recited the entire gamut of artificial foods, recounting their merits and demerits. He emphasized the importance of breast feeding and asserted that the use of sweetened condensed milk was the greatest menace in infant feeding in West Virginia. He laid stress upon the necessity of controlling the number of feedings and the quantity, the quality of composition, and the regularity of infant feeding.

This paper was immediately followed by one on "Some Generalities in Infant Feeding," by C. L. Holland, M. D., Fairmont. He claimed that the problem of nutrition the most important in infant life. He advocates breast feeding wherever possible, condemns the choosing of one artificial food and the giving of this alone, and urges that the doctor carefully advise as to the indications of a change of food and the adjusting of such food preparations to suit the peculiar needs of each individual infant. He advocated the modification of clean cow's milk as the best artificial food.

Dr. H. G. Steele, of Bluefield, then presented a carefully prepared report of a most interesting and rare anatomical anomaly—A Case of Vaginal Septum and Bicornate Uterus. He was followed by Dr. M. V. Godby, Charleston, who gave a most instructive paper on "Organotherapy as an Aid in Gynecology with Special Reference to the Pituitary." He emphasized the importance of the Thyroid Gland in the economy of the human system. He maintained that a direct relation existed between the sex glands and the pituitary and that thyroid and ovarian feeding is beneficial in the treatment of the diseases of women.

The morning session then adjourned.

The afternoon session of May 19th was devoted exclusively to the consideration of surgical papers and was opened by an excellent production by Dr. W. W. Golden, Elkins, on "Dislocation of the Semilunar Bone: Report of Case in which Reduction was Successful." Dr. W. W. Strange, Huntington, then gave a most able paper on "Heat and Cold in the Treatment of Superficial Inflammation," which called forth much valuable discussion.

"Surgical Treatment of Birth Trauma" was the subject of the next paper which was presented by Dr. J. M. Emmett, Huntington.

Dr. Cannady, Charleston, then presented an excellent paper on "Fracture of Long Bones." He advised not performing a major operation when good results can be obtained otherwise. The essentials upon which he laid stress were: 1. Relative Fixation at place of fracture. 2. Traction sufficient to prevent shortening and for a long enough period to establish union. 3. Suspension for the sake of comfort, drainage and handling. 4. Proper passive mobilization of adjacent parts. 5. In compound fractures, removal extraneous and infected areas. He advocated the use of Deakins Solution and warned about the careless handling of patient from site of injury to hospital or location of the surgeon. He spoke of the advantage of callipers.

This paper called forth a world of discussion. Dr. Kessler, Huntington, advocated open method, when facilities of hospital are available.

Dr. Hicks, Welch, urged the necessity of the operative open method especially in spiral or oblique fractures. His experience with calipers had not been very encouraging and he advocated in bad fractures the use of plates and metallic bands, the same to be removed before patient leaves hospital.

Dr. Golden, Elkins, declared fractures needed constant attention and warned against reduction and tying up and then not looking after the fracture to see that extension applied really extended.

Dr. Godby, Charleston, spoke of the necessity of the open method in fractures of the surgical neck.

Dr. Hupp, Wheeling, called attention to the fact that most of the malpractice suits arose from fractures of long bones. He advised X-Ray when patient arrived and before reduction, then X-Ray after reduction, and the showing of these plates to patient and relatives and the explanation that while the functional result will be good if they desired anatomical apposition an operation will be necessary and place the responsibility on them. He further advocated gravity method of fractures of the clavicle.

Dr. Butt, Elkins, advocated the use of callipers and cautioned against tight bandaging.

The next paper was one on "Preoperative Localization of the Acute Appendix," by Robert J. Reed, Wheeling. He claimed the precise location of an appendix is often a puzzle, but it often proved worth while to take the trouble to attempt the localization, and make incision accordingly. Points that will aid in fixing location are: 1. Point of maximum tenderness. 2. Direction in which pain radiates. 3. Area in which the muscles are most tense and traction seems greatest.

Dr. H. G. Nicholson, Charleston, then read a paper on "A Plea for the Normal Appendix." He claimed that its mucous, and glandular structure must be of some use in the economy of the body and doubted the advisability of the removal of, simply on general principles, when the abdomen was open, when this organ was apparently normal.

Dr. Frank Lemoyne Hupp, Wheeling, then favored us with an excellent paper on "Further Observations in Abdominal Surgery," in which he touched on the finer points in this work. He cautioned against the danger of hemorrhage, perforation and pressure complication by permitting drainage tubes to remain so long as three or four days. He urged good drainage, the elimination of primary area of infection, the stimulation of the circulation, the kidneys, and all the eliminating organs of the body. He emphasized the merits of rest and the danger of too much handling of the tissues in the abdomen and called attention to the value of rectal examination and the opening and draining of abscesses by this route.

In the discussion of this paper Dr. Cunningham, of Marietta, O., advocated washing out of the abdominal caviety, good drainage and the placing of the patient face downward in bed.

The next paper was an able production by Dr. W. H. St. Clair, Bluefield, on "Baldwin's Operation for Congenital Absence of the Vagina." He presented a fine collection of drawings showing the different stages of the operation and reported two cases in which he had used this operation.

The last paper of this session was one by Dr. T. W. Moore, Huntington, on "Foreign Bodies in the Air Passages." He pointed out the frequency of these cases, the dangers, and the various procedures in handling such cases.

The session then adjourned.

The Wednesday evening session was devoted to Public Health and was presided over by Dr. S. L. Jepson, State Commissioner of Health, Charleston.

Dr. Carl F. Raver, Vital Statistician, State Health Department, opened the program by an able paper on "West Virginia's Need of a New Vital Statistics Law. He was followed by "The Health Center as a Factor in Disease Control," by Health Commissioner Jepson. Then Dr. A. J. McLaughlin, Assisttant Surgeon General, U. S. Public Health Service, Washington, D. C., gave a most interesting and instructive address on "Preventive Medicine," in which he showed the great need as demonstrated by the war, and the great strides in advancement of this most important phase of medicine.

A vote of thanks was extended to Dr. McLaughlin and the Department he represented for his presence and his excellent address.

The morning session of May 20th was held in Lincoln theatre and was opened

by excellent display of slides and instructive talk on "Diagnosis and Treatment of Gastro and Entero-Optosis," by Dr. L. O. Rose, Parkersburg.

Dr. Joseph E. King, New York, then presented the finest moving picture demonstration of the complete operation of Cranioplasty ever seen by the Association. In brief introductory remarks he spoke of the advances and technique and the uses of cranioplasty.

The next paper was an able treatise on "The Radium Treatment of Uterine Cancer," by Curtis F. Burman, M. D., Baltimore. He emphasized the fact that success in treating malignant new growths is directly proportional to the thoroughness of treatment and indirectly proportional to the extent of the disease. Hence the necessity of bringing uterine cancer sufferers to treatment while the disease is still in its initial stage and the necessity of educational work on the part of the doctor. He then took up the body, the cervix and the adjacent vaginal structures and discussed the merits of the use of radium versus operation in treatment of cases showing that the extent of involvement and the location of structures involved largely governed the same. Whenever irregular bleeding, discharge, or pain in the pelvis is present cancer must be considered regardless of age. Thorough examination must be made even if anaesthesia is necessary. In cases suspected, where vaginal portion of the cervix is not involved, rectal examination is all important. Shortening of one or both of the bases of the broad ligaments is always suggestive of cancer. Curettage should be made and microscopic examination carried out, especially to differentiate luetic, tubercular, and other non-specific ulcers. He illustrated his talk with many lantern slides.

Dr. J. C. Blood, Baltimore, followed with an illuminating address on "Early Recognition of Lesions which may be Cancer." He declared that early recogtion of cancer is a matter of personal hygiene. That it is rarely recognized until too late to operate. Only about 15% of cases when diagnosed are operatable. He urged that the doctor must realize that he is a teacher and that teaching is as much a function of his profession as treating patients. Further that if people take our advice and come to us early we have tremendously increased our responsibility. For the earlier they come the more expert we must be to determine whether a case is malignant or not. We, as a profession, have reached a stage in which a co-ordinative and not competitive status can and should exist.

He then took up cancer of the breast, the lipi and the skin, showing by slides the various stages and the treatment necessary for each. He urged the serious co-operation of the profession in painstaking concern and careful investigation in all cases where there is the least suspicion of malignancy.

Dr. Emil Novack, Baltimore, then presented a paper on "The Mechanism and Clinical Interpretation of Uterine Bleeding." He warned against the making light of and the neglect of thorough investigation of any abnormality in uterine bleeding. He explained the significance of certain chains of symptoms and illustrated his talk with a number of very carefully prepared lantern slides.

The morning session then adjourned.

The afternoon session was held in the Elks' Home Auditorium and was opened

by a paper reciting a case of "Rupture of Rectum During Labor," by Dr. A. J. Noome, Wheeling. He was followed by a paper on Co-existence of Gall-Bladder and Appendical Infection," by Dr. W. A. Quimby, Wheeling. In this he made a plea for the use of X-Ray in diagnosis.

The Prostate was the subject of the next two papers. The first was on "Pre-Operative and Post-Operative Care of Prostatic Enlargements," by Drs. J. C. Matthews and R. M. Bobbitt, Huntington. Dr. Bobbitt read the paper, the contents of which showed much careful observation and study of the subject by his collaborator and himself.

Dr. E. O. Smith, of the University of Cincinnati, then presented a masterly paper on "Prostatic Infections and Their Treatment." He threw on the screen a number of most excellent slides, showing the different cellular and glandular structure and tissue found around and in the prostate.

He pointed out how this peculiar combination of tissues made the problem of an infected prostate different from any ordinanry abscess and hence required different methods of approach in treatment. He stated that most infections of the prostate were due to gonorrhea and that in these cases the general principles of treatment were as follows: 1. So long as the infection is confined inside the prostate proper the abscess was emptied by massage or by puncture. 2. When the infection was outside in the peri-prostatic tissue the best procedure was to open and drain through the rectum. 3. In other cases the opening was made via perineum and extraurethral drainage. When the infection was tubercular, which is rare, improvement is sometimes marked after epididemectomy, although sometimes the very radical complete removal is advisable.

The next paper, presented by Dr. R. J. Wilkinson, Huntington, on "Some Recent Advances in Treatment of Rectal Diseases." He was followed by Dr. O. D. Barker, Parkersburg, who presented a paper on "Essential Renal Haematuria." He presented the report of two cases and showed how by the use of the cystiscope he ruled out other conditions. He then outlined the treatment used in these cases.

With this paper the Scientific Program closed and the session adjourned sine die.

Thus ended a most successful Annual Meeting of the Association. The boundless hospitality of The Little Kanawha and Ohio Valley Medical Society and the people of Parkersburg will long linger in the minds of those who attended as a most delightful memory. Amongst the many social functions given in honor of the visiting members were the Stag Smoker and Vaudeville on Wednesday evening at The Elks' Home, the Tea at the Country Club and the auto ride given the ladies on Wednesday afternoon, the luncheons given at the City Hospital and at the St. Joseph's Hospital Thursday noon, the boat ride on the Ohio on Thursday afternoon, the sumptuous banquet with its tempting viands and aftermath of wit and humor and the Stag Reception given by Dr. L. O. Rose, in his offices. All of which, together with the individual members of the profession in Parkersburg, were greatly appreciated and will long be remembered.

Announcements and Communications

The following letter will explain itself.—Editor.

Elkins, W. Va., July 14, 1920.

The Conservative Life Insurance Co.,
Wheeling, W. Va.

Gentlemen:

Your circular letter of the 28th June informing your examiners that they would receive $3.75 for examination of "joint cases," $5.00 for others received.

I have not made an examination for less than $5.00 for many years and have not the least idea of beginning now.

Statistics given out by the government say that $2,000.00 pre-war currency is now worth in purchasing value $800.00. In the face of this you wish us to examine for $3.75.

Nothing doing. Very truly yours,

A. P. BUTT.

Charleston, W. Va., June 23, 1920.

James R. Bloss, M. D.,
Editor of W. Va. Medical Journal,
Huntington, W. Va.

Dear Sir:

Enclosed please find an article containing some facts regarding children to be placed in homes by this Board. May we ask that you give space and the best of publicity to the article, or that you re-write it, and make as strong a plea as possible for these little fellows. It is only by such gratuitous assistance as this, which is beyond valuation, that we can expect to give these unfortunate little children the opportunities which they deserve, and which may be the turning point in their lives.

Thanking you very sincerely for your co-operation, I am

Sincerely,
L. H. PUTNAM,
Executive Secretary.

The State Board of Children's Guardians, with headquarters in Charleston, have as a part of their work, the responsibility of finding homes for homeless children. As was pointed out in a recent interview with Mr. L. H. Putnam, Executive Secretary, it is the desire of the Board to fit the child to the home, and vice versa, and to place the children in homes of like faith insofar as possible. It is a comparatively easy matter to find good homes for the good looking children, but quite a different matter when the children are not so blessed with good looks, as judged by most people.

The dependent children of the state who have been committed to the care of the State Board of Children's Guardians, are taken to the Children's Home in Elkins, W. Va., where they are kept until such time as they can be prepared for placement. At present there are about twenty children in the Home ready for placement, eighteen of whom are boys. Of this number, fifteen are between the ages of five and twelve, and in some cases they are freckle faced, pug nosed, minus a tooth or two, and with stubborn hair which refuses to behave. But these boys are just as manly, just as physically and mentally fit, and their smile just as bright and wholesome as the good looking little fellow who is usually chosen by the applicant.

After all it doesn't seem quite fair, does it? Too many of us fail to appreciate the position these unfortunate little fellows were placed in by being created ugly instead of handsome, but when given a chance, these boys more often than not, take the lead. President Wilson has said, "The beauty of a democracy is that you never can tell when a youngster is born what he is going to do and that, no matter how humbly he is born, no matter

what circumstances hamper him at the outset, he has a chance to master the minds and lead the imaginations of the whole country."

More than fifty years ago a carload of waifs from the New York Children's Aid Society came into Tipton, Ind. Judge Green was asked if he would take a "kid." "Yes," he said, "if you will give me the ugliest, dirtiest, raggedest one in the bunch." Johnny Brady stepped forward and guessed that he would fill the bill. Judge Green took him. Later the boy went to Yale and worked his way through. He became a Presbyterian minister and a missionary in the North West. Finally John Green Brady, as he was then known, became governor of Alska. His death occurred in December, 1918. One more proof that you never can tell what latent possibilities may be in the least attractive of these homeless children.

There is nothing in all the world so important as children, nothing so interesting. David Starr Jordan, Chancellor Emeritus of Leland Stanford University, says: "If you ever wish to be of any real use in the world, do something for children." The normal place for every normal child is in the normal home, and while these particular children have not the beauty of perfect features, they are normal in every particular, and have been forced to remain "unwanted" only because of their lack of beauty.

It is the earnest hope of the State Board of Children's Guardians that applications for these unwanted boys will be made promptly. Is there not some home in this city who will be willing to give one of these boys the chance he deserves? Application may be made by writing Mr. L. H. Putnam, Executive Secretary, Armory Building, Charleston, W. Va.

SOUTH AMERICAN SURGEONS

(Continued from July Issue)

And so Pizarro sits this Sunday morning under a white canopy on the deck of his flagship, surrounded by his faithful adherents, and enjoys a day of rest. The coast on the conquered continent is within sight, and over the rugged hills of the shore-line occasionally appear the snow-capped peaks of the second tier of mountains. We are just under the line of the sun on its excursion back from the Tropic of Capricorn, and the rays are perpendicular. But Pizarro and the conquering army care not because the Humboldt current with its cool water from the south pole has also brought a gentle, cooling breeze. So while the church bells in all parts of the world are calling the men and women to worship, and to observe their prosperous neighbors' apparel, we too take stock and give thanks for the wonderful new friendships we have made. But the chief, in his thirst for conquest, is drawing a new line on the map of the continent—a red mark which extends to Chile, Argentine, and Uruguay, and the ship turns its prow in that direction.

IX. DR. MARCELINO HERRERA VEGAS

Dr. Marcelino Herrera Vegas, who is easily the dean of surgery of the southern continent, is a man whom it is an exceptional honor to know. He has the face of a seer, and he possesses a sensitive, aesthetic temperament. He is of a family of distinguished Argentinians, the estate of which dates back to the foundation of the Republic. His town residence is a palace—the repository of works of art in painting, sculpture, literature, and

the furnishings of a refined household. His library, with its gallary, is a cabinet of exquisite taste and appropriateness. With his own hands he has cross-indexed and catalogued the contents. The books, all his friends, are clothed in appropriate and substantial bindings, as he would dress his sons and daughters whom he loves. He writes with his own hand his literary contributions and gets recreation by making his own research. When his eyes and brain are tired, instead of playing games, he practices his languages and reviews his poets by writing plays in long-hand and by copying his favorite poems. He has twice written the plays of Shakespeare in long-hand to aid him in perfecting his English. To illustrate some point in conversation, he occasionally quotes to you a thought from an English, German, French, or Spanish poet, and then repeats the exact words with the interrogation: "Do you remember?" And, of course, as a rule you do not. Men of his class seem to have sufficient time in which to crystallize their knowledge, and they have a knack of utilizing their learning without appearing ostentatious. Dr. Vegas would rather know thoroughly the great thought of a master, in order that he might live it, than be the originator of something but little better than the commonplace. We, in rapid-fire America, must seem crude and immature in comparison with the associates of this man who reads his classics, and who has gained for himself a knowledge of the best of the ages. And with it all he is a practical teacher of surgery; he is a skilled operator; he endeavors to redeem the cripples and to save the lives of the poor of Argentine; he is a scientific man in the understanding of his art; he visits hospitals, dresses wounds, is a time-server, follows schedules, and consults time tables. When the summertime has come and he is through with his classes and the day's work is done, he does not employ his time in useless play, but goes to his hacienda and lives with the out-of-doors, the companions of his estate, and supervises the cultivation of the land. He watches trees grow that were planted by his grandfather, and he plants trees that will be watched and enjoyed by his grandchildren. This is our friend as we learned to know him—a superb character, a true gentleman, and one who is greatly admired by his confreres.

And this is the type that we met among the professional men of the cities of the four South American republics which we visited. We found a premium placed upon education, a knowledge of the languages, and experience gained in foreign travel. The cultivation of the finer graces is encouraged. The study of art, literature, and music of the highest quality is pursued, and a knowledge of the finer arts is considered essential to good breeding. I wish that all of our friends could know as we do these outstanding characteristics among their maturer men, who are so honored and looked up to by their younger followers and admirers—Gregorio Amunategui, Alberto Adriasola, and Lucas Sierra, of Chile; Marcelino Herrera Vegas, Daniel J. Cranwell, and Pedro Chutro, of Argentine; A. Ricaldoni, Enrique Pouey, and Gerardo Arrizabalaga, of Uruguay; and Juvenal Denegri, Miguel C. Aljovin, and Guillermo Gastaneta, of Peru.

X. THE ROMANCE OF A DENTAL COLLEGE

February 13. An interesting diversion this morning was a visit to La Escuela Dental, the dental department o fthe University of Chile, at Santiago. The Dean, Dr. Jerman Valenzuela, was our host and conducted us through a modernly

equipped dental school. This institution has accommodations for three hundred students. Each student has a complete equipment, including a dental chair, instrument cabinets, instruments, supplies, and a laboratory for conducting a scientific clinic in dentistry. The building covers an entire block and is two stories in height. It is comparatively new and splendid architecturally.

Attached to the founding of this department of the university is an interesting romance which involves the supposed murder of a German Consul; the burning of the legation; the mysterious disappearance of the janitor of the building, and of a large sum of money belonging to the Consul's country which had been taken from the safe. A search among the ruins revealed the body of a man, much disfigured, on which were found the shirt-studs, cuff-buttons, and other personal effects of the Consul. The Chilean Government was much humiliated by the atrocious murder, and proceeded to make amends for the tragedy in every possible way. The official received a magnificent burial, and the state vied with the municipality in doing honor befitting the station of the deceased and the country which he represented. During the inquest, Dr. Valenzuela, the dentist, requested the privilege of examining the jaw and teeth. He made careful notes of his findings. He discovered that the murdered man had splendid teeth without fillings or defects, and that one wisdom tooth was missing. He then consulted the wife of the Consul and learned that her husband had had defective teeth and had been the subject of considerable dental repair. The wife of the janitor stated that her husband had had perfect teeth and had consulted a dentist on but one occasion, when he had had a tooth extracted. This information, which confirmed Dr. Valenzuela's suspicion, was communicated to the proper authorities. The investigation that followed led to the capture of the official who had become snow-bound in the Andes in his attempt to escape with his bags of gold. He was brought back to Santiago, tried for the murder of the janitor and treachery to his government, and finally executed. In the meantime, the janitor had received a state funeral. He had been buried with great honor, and his remains placed in a mausoleum, as befitted the rank of an honored official of a great nation. The clearing of the mystery had relieved the Chilean government of serious humiliation and embarrassment. Attention naturally turned to the unostentatious man who, by careful observation, had been instrumental in clearing up the international disgrace. What could the government do for him? He asked nothing for himself, but suggested that he had long possessed an ambition to build a model dental college for Chile. The Chilean Government asked him to present his plans, and the final result was the establishment of the thoroughly equipped institution that we visited today. We received a hearty welcome from this "Sherlock Holmes," Dr. Jerman Valenzuela, the Dean of LaEscuela Dental, who has every reason to be proud of his ideal institution.

(*To Be Continued in September Issue*)

The West Virginia Medical Journal

JAS. R. BLOSS, M. D., Editor
C. R. ENSLOW, M. D.
J. E. RADER, M. D. Assistant Editors

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All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

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The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

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Organization Again

There is scarcely a week that passes but something comes to notice to impress upon the profession the value to being a more closely knit organization.

A letter from Dr. Butt, which appears under Announcements and Communications, is the particular matter this time.

Why it is that the impression prevails that physicians are "Easy Marks" and will submit to just anything dictatorial, is not an easy thing to understand. Possibly the fact that usually we are too busy to give thought to what is taking place outside of the healing of the sick, has caused us to neglect the business part of our lives.

For a long time the need for us to get together and insist as a strongly knit body, upon being consulted upon these policies which very vitally affect us has been apparent.

There has not been an increase in the incomes of physicians to insure the meeting of the increased cost of all things used by us in our work to

say nothing of the increase in the actual living expenses of the present.

The well organized bodies of skilled labor, and unskilled, too, for that matter, have been and are making strong fights to secure such advances in the pay for their work as to at least meet the cost of living. It is our impression that the great body of our profession is having equal difficulty, if not greater, in meeting the advance. Yet on top of this we are asked to stand for reduction of our wage rather than an increase.

Dr. Butt is to be very strongly commended for the independence of his stand. We should all take our place by his side. There are matters upon which we must unite and stand firm. One of them is that we shall ourselves be at least consulted in the matter of determining the remuneration we are to receive for services rendered.

Membership For 1920

A letter from Dr. Anderson states that already he is beginning to see results from the campaign for ONE THOUSAND MEMBERS for this year. He does not say that the entire number has yet been secured, but that new ones are being added.

This is very gratifying, and it is hoped that the earnest effort of all will continue until every available man is within the fold of the Association. They will all come in, too, if we but go to see them and present the many advantages of a closely knit organization.

Let us keep on working.

In order to have the report of the annual meeting and report of the council printed in its entirity in this issue it will be necessary to omit the sections of Medicine and Surgery.

Second Summers

In this issue appears a paper read recently before the Marshall County Society. It has seemed that this is such a pertinent paper at this time that it is published with the hope that it will be carefully read by all of the Journal's readers.

One is lead to wonder if the author had not just come in from seeing one of these little patients in the midst of all the unsanitary surroundings which he describes, when he wrote his paper. It is not a pleasing picture of home care which he paints and probably he has given us one of the worst experience he has recently had to contend with and his paint has been of only the one shade, "deep blue".

There is much in this matter of sanitation and clean food and the right kind of food, together with the proper preparation of it. Indeed if we could but get parents and nurses to properly appreciate the absolute necessity for carefully attending to these then this "second summer" would be shorn of all the dreads and dangers which attend it.

The greatest difficulty experienced is to get the idea out of the minds of the grown-ups that the babies are not as yet prepared to digest the usual family diet. One loses patience (along with religion) when he finds that the father has given a fifteen months' old baby some "cold slaw", because the child wanted it and "had never been sick a day in it's life". Yet all of us have these things to contend with and will read Dr. Ash-

worth's paper with deep feeling and a very understanding sympathy in those things which he insists upon.

General William Crawford Gorgas

A man sometimes becomes a tradition or a symbol. Before his death, Gen. William Crawford Gorgas had become a symbol of hygiene; an idol to whom all the nations of the world appealed when threatened by deadly plague or perilous infection. The tradition, in this case, was based on a record of successful accomplishments; yellow fever driven from Havana; Panama—the "White Man's Grave"—made one of the most healthful places in the world; investigations on pneumonia in Africa, and an American army under his protection, with one of the lowest mortality records heretofore achieved. It is not necessary to repeat here how these sanitary triumphs were developed. Much has been written on the subject, and no doubt the future will produce competent histories and appreciations; but it is interesting to consider the record in relation to Gorgas, the man. His personality was not that of the indomitable leader whose word is law and who brooks no interference. He was a man of soft word and kind thought, seeking counsel and gathering around himself associates whom he trusted and who put their trust in him. He made many friends through his ever gracious manner. He greeted all with a smile of welcome, ever ready to hear both sides of any case which might come before him in the many positions of leadership which he held. He commanded the love and respect of all with whom he came in contact. It was this that made it possible for Dr. Gorgas to accomplish the great works that have made his name a household word in every civilized land. "In the conquest of science over disease," said Welch, on one of the many occasions in which the medical profession honored General Gorgas, "in the saving of untold thousands of human lives and human treasure, in the protection of our shores from the once ever-threatening scourge of yellow fever, in the reclamation of civilization of tropical lands—in results such as these are to be found the monuments of our laureate, his victories of peace."—J. A. M. A.

State News

Dr. K. C. Thomas, formerly located at Welch, has removed to Matewan.

Dr. F. C. Hodges, of Huntington, enjoyed a vacation of several weeks at his old home in Greenville, N. C.

Dr. George M. Lyon, of Huntington, a recent graduate of John Hopkins University, is to be in charge of the Harriett Layne home for invalid children His duties will begin on September 1.

Dr. and Mrs. Claude L. Holland, of Fairmont, recently entertained with a luncheon honoring Dr. H. C. Davis, of the John-Hopkins Hospital, Baltimore, who had been in that city for two days.

Dr. D. J. Cronin, of Huntington, who served in the M. C. during the war spending a year in oversea duty, has returned to his practice. He has been doing special work at Bellevue Hospital, New York City, since his discharge.

Dr. W. T. Oppenheimer, chief surgeon of the C. & O. R. R. of Richmond, attended the commencement exercises of the Hospital in Huntington and delivered the principal address.

Dr. J. F. May, formerly located at Logan, has removed to Whitman.

Dr. A. F. Compton and Miss Agnes Wood, of Buffalo, N. Y., were married June 29th. Dr. Compton will reopen offices in Moundsville, where he will practice his specialty, eye, ear, nose and throat.

Dr. B. F. Bone and family, of Moundsvillle, are spending their vacation at their summer home at Lake Odessa, Michigan.

BORN—To Dr. and Mrs. O. P. Wilson, of Moundsville, a daughter, on June 29.

Dr. Leo Covert has opened offices with his father, Dr. O. F. Covert, on Jefferson avenue, Moundsville.

Dr. Frank LeMoyne Hupp, of Wheeling, read a very interesting paper on the Present Status of Appendicitis before the Marshall County Medical Society at its recent June meeting.

Dr. J. A. Striebach, of Moundsville, and Miss Alice Pope, of Wheeling, were married in June.

Dr. J. E. Cooper, of Cameron, has returned from Baltimore where he took a post-graduate course.

Dr. Joseph E. Arnold has moved from Pleasant Valley to Calis.

The Reynolds Memorial Hospital at Glendale has taken out its old X-ray equipment and installed new machinery of the very best model.

84th Birthday

Dr. J. H. Brownfield, venerable and much beloved physician of the city, will pass his eighty-fourth birthday anniversary tomorrow, July 5. There will be no formal celebration although in keeping with the annual custom Dr. Brownfield will be at home to his friends at his Main street residence and many will call to extend to him the felicitations of the occasion.—Clipped from Fairmont paper.

Elkins, W. Va., July 2, 1920.

Class reunion, C. of P. & S. Baltimore, Class of 1895. Present Finch, Vogel, Murray, Ayers, Moorehead, Hadley, Hammack, Owens, Shirey, St. George, McGlannan, Brack, Hannah, Hawkins, Allen, Weil, Savage, Brunner, Bryant and Butt.

Oceans of wet goods, banquets, trip down bay, etc.

A. P. BUTT.

Dr. R. A. Ireland and family, of Charleston, are enjoying a ten days' visit in Atlantic City. Later Dr. Ireland expects to attend the New York Post Graduate School for three weeks.

Dr. G. H. Barksdale, of Charleston, has returned from a visit to New York.

Dr. A. S. Boggs, of Charleston, has returned from a visit to clinics in Chicago.

Dr. W. P. Black, of Charleston, has returned from a few weeks' stay in Baltimore, where he attended a number of clinics.

Dr. W. A. McMillan, of Charleston, is spending a few weeks in Canada and England.

Dr. and Mrs. L. C. Covington have returned to Charleston from a visit to Louisville.

Drs. G. C. Schoolfield and H. H. Young, of Charleston, are spending some time on their farm near Buffalo, W. Va.

Dr. Hugh G. Nicholson has returned to Charleston from Boca Grande, Florida, where he enjoyed two weeks of most successful fishing, and more than doubled his weight, as he gained 18 pounds, and is looking fine. Dr. Nicholson also prepared his latest fish yarn while on this trip, as he says that he landed 32 tarpons, 11 of which were caught in one night.

Quite an enjoyable affair in the medical profession of Charleston is the luncheon given every Thursday noon at the Hotel Kanawha. Business is entirely forgotten on this occasion, and only social matters discussed.

Dr. P. L. Gordon a .d family, of Charleston, left July 20th for North Carolina where they will visit for one month.

Dr. M. L. Dillon and daughter, of Charleston, are spending a two months' vacation at Round Hill, Va.

Dr. Wm. A. Thornhill left Charleston July 18th for Philadelphia, where he is taking a special course in radium treatment.

Dr. J. E. Cannaday, of Charleston, left July 17th for Rochester, Minn., to attend the Mayo Clinic. He expects to visit Chicago on his return to Charleston.

Dr. P. A. Haley and familly, of Charleston, left July 17th for a motor trip through the north. They will be away for one month.

Dr. A. N. Henson, of South Charleston, lieutenant in the M. C., has received his honorable discharge.

Dr. Oscar Biern has returned to Huntington from the east where he has been doing special work in some of the hospitals. He will open offices soon and will specialize in diagnosis and internal medicine.

The American Roentgen Society will hold its annual meeting at Minneapolis, Minn., September 14, 15, 16, 17. On September 14th the Society will meet at Rochester on the invitation of Dr. William J. Mayo at the Mayo Clinic.

Major-General William Crawford Gorgas, former Surgeon-General of the United States Army and President of the American Medical Association in 1909-1910, died in London, July 4. Early in May, General Gorgas left the United States for the west coast of Africa, to head a sanitary commission of the Rockefeller Foundation, arriving in London, May 19. He proceeded to Brussels, where he was decorated by King Albert, and

after a tour of Belgium and of the Rhine district around Coblenz, he returned to London. Here he suffered an attack of cerebral hemorrhage on the morning of May 30, since which day he had been critically ill at Queen Alexandra Hospital, where he was attended by Brig.-Gen. Robert E. Noble, U. S. Army, and by medical officers of the British Army. Full military honors were accorded to him at his funeral, July 9, at St. Paul's Cathedral, London, which was attended by representatives of King George and of the government services, and by members of the medical profession and the scientific world. His body will be returned to the United States in a government transport.

Where Triplets Meant Crime

The old Uganda marriage laws condemned to death any woman who gave birth to triplets, because the natives considered the occurrence due to witchcraft.

John Roscoe, leader of an ethnological expedition to Uganda, writes to the London Times the following:

"The old marriage laws here have taken me some forty hours to note down, and I discovered today how dreadful it was in the olden times for any woman to have triplets. One case which my informant had witnessed will suffice to make you understand the horror felt by the people when such an event occurred. A woman gave birth to triplets, and the event was duly related to the king, whereupon he sent men to take the woman with the children, and also the maternal grandparents, into the wilds, and had them all speared to death. The husband of the woman had his eyes gouged out, lest he should ever look upon the king and bewitch him.

"These pastoral people are closely allied to the Baganda, and are, I think, a different branch of Hamitics from the Ankole Bahima."—C. S. H.

Well Known Psychologist Dies

James Hervey Hyslop, well known psychologist and editor of the Journal of the American Society for Psychical Research, aged 65; died, June 17, from cerebral thrombosis, and his brain was given to Dr. Edward A. Spitzka, New York City. When received by Dr. Spitzka after five days' immersion in 5 per cent. formaldehyd solution the brain weighed 1,290 grams, or 45.5 ounces avoirdupois.

Ask Leniency for Physician Convicted of Manslaughter

The conviction of Dr. Julius Hammer of the Bronx for manslaughter in the first degree for having performed a curettage on a woman, which resulted in her death, has called forth protests from Bronx physicians. A petition signed by 400 physicians and surgeons has been presented to the Bronx County court asking for clemency for Dr. Hammer. This action is said to be a forerunner of a movement to appeal to the legislature to amend the penal law so as to make it possible for a physician to perform an operation of this kind to protect the life or health of a patient without fear of spending twenty years in prison. Physicians state that in the present case the operation performed by Dr. Hammer was justifiable and object to having "a jury of laymen pass judgment on the acts of reputable doctors.'

New York

Mullan Bill Signed. — Governor Smith has signed the Mullan bill to amend the public health law in relation to the practice of nursing, by including the terms of "trained, certified and graduate" nurse along with that of "registered nurse."

The Doctors and Surgeons of the Hospitals in Vienna declare that they cannot live on their present pay, and threaten to go on a strike. Their present remuneration is less than that of the washerwomen in the same hospitals.

Applicants for Positions in Medical Corps

Considerable disappointment exists in the War Department because of the fact that only 1,300 applications have been received for the examination for the appointment of officers in the Medical Department of the Army. This examination is being conducted by the War Department under the Army Reorganization Act of Congress, passed at the recent session, and is intended to fill approximately 1,000 vacancies in the commissioned medical personnel of the Army. This act of congress permits medical officers who served in the war to be appointed in the Regular Army and a special examination scheduled to be held July 7, 1820, is open only to physicians who were in the war.

On account of the fact that only a comparatively small number of applications have been received, it is the opinion of War Department officials that an additional call for applicants will be necessary to fill the vacancies that will be caused by the Army Reorganization Act. No official information is available at the present time as to what method will be employed to secure additional medical officers. It is quite certain, however, that not more than 50 per cent. of the 1,300 applicants will qualify physically and professionally for army service.

Medical Society of D. C. to Have Home

The cornerstone of the new home of the Medical Society of the District of Columbia was laid on May 6, Dr. Charles W. Richardson presiding over the ceremonies. The new building is to be at 1716 and 1718 M Street, N. W., and it is expected that it willl be ready for occupancy in November. At the exercises, short addresses were made by Dr. Francis R. Hagner, president of the Society, and by Drs. Wilfred M. Barton, Jos. S. Wall, and John B. Nichols. Dr. Tom A. Williams presented a handsome donation from one of his friends who was much interested in the movement.

Public Health Nurses in Ohio

There are now 405 public heallth nurses working in Ohio, not counting nurses employed in industrial plants.

Society Proceedings

On the evening of July 15th, at the Hotel Frederick, the Cabell County Medical Society entertained the nurses of the Huntington Nurses Association at a banquet. The tables were arranged in the form of a cross, with center decorations of gladiolas, and boutonaires at the plates.

Dr. R. H. Pepper acted as toastmaster. Those responding to toasts were: Miss Anna Trimble, Drs. C. T. Taylor, J. Ross Hunter, J. A. Guthrie,

W. E. Vest, E. S. Buffington, I. C. Hicks, J. E. Rader, J. M. Emmett, A. K. Kessler, R. M. Bobbitt, F. A. Fitch and R. H. Pepper.

This marked the closing of the present session of the Medical Society during the hot months. The next session will begin about the middle of September with a complete program until the close of the year.

Those present were: Drs. Pepper, Burns, Shirley, Vest, I. W. Taylor, C. T. Taylor, A. K. Kessler, J. C. Kessler, Marple, Hicks, Matthews, Bobbitt, Yost, Hodges, L. C. Morrison, G. C. Morrison, Martin, Byrd Hunter, J. Ross Hunter, Lyon, Hubbard, J. A. Guthrie, Klumpp, Willis, Buffington, Mayberry, Adkins, Bryan, Steenbergen, Emmett, Rader, Fitch, Sutphin, Hopkins, Misses Trimble, Oliver, Spencer, Brammer, Martin, Walker, Ohl, Young, Brinkley, Fowler, Noel, Matthews, Sayre, Goff, Staley, Reid, Lowing, Arnold and Fulton

F. C. HODGES, Sec'y.

The Mercer Medical Society met in a regular session on June 24 in the Chamber of Commerce of Bluefield, Dr. C. T. St. Clair presiding.

There being no clinical cases to present the papers were then read. Dr. W. W. Morton read a very interesting paper on "The Pandemic of 1918" which was discussed by a number of members present. Following Dr. Morton, Dr. F. F. Farnsworth, director of bureau of venereal diseases of this state, gave us a very interesting and instructive lecture relative to this department, also showing us some lantern slides of the technique and the treatment of venereal diseases. The society was very glad to have Dr. Farnsworth with us and ask him a number of questions relative to the treatment and law in regard to reporting these cases. There being no further business the society adjourned to meet at Mercer Healing Springs on July 22 at 3 p. m.

E. H. THOMPSON,
Secretary.

CRILE AND LOWER'S SURGICAL SHOCK

(Second Edition of "Anoci-Association")

Surgical Shock and the Shockless Operation through Anoci-Association. by George W. Crile, M. D., Professor of Surgery, School of Medicine, Western Reserve University, Cleveland; and William E. Lower, M. D., Associate Professor of Genito-Urinary Surgery School of Medicine, Western Reserve University, Cleveland. Second Edition of "Anoci-Association" Thoroughly Revised and Rewritten. Octavo of 272 pages with 75 illustrations. Philadelphia and London: W. B. Saunders Company, 1920. Cloth, $5.00 net.

W. B. SAUNDERS COMPANY
Philadelphia London

The discussion of the various theories of shock has been eliminated from this edition which we believe is a very good thing as so much has been written and still nothing but theory remains with little satisfactory proof of to sustain any of them. Chapter XXII is a clear, concise statement of the present status of the Anaesthetic question. Chapter V is given to the general technique of Anociation. Numerous different conditions to which it is applicable are fully discussed in separate chapters and the application and operation mapped out

so clearly that the surgeon can scarcely go astray. A valuable scientific work for which the profession should be, and no doubt is, fully appreciative.

Book Notices

The American Illustrated Medical Dictionary, a new and complete dictionary of the terms used in medicine, surgery, dentistry, pharmacy, chemistry, nursing, veterinary science, biology, medical biology, etc., with the pronunciation, derivation and defination, including much collaterall information of an encyclopedia character. By W. A. Newman Dorland, A. M., M. D., F. A. C. S., Tenth edition, revised and enlarged. 1920, W. B. Saunders Company, Philadelphia and London.

Although this tenth edition has been enlarged to some 1201 pages, we note some omission, among which may be mentioned that of the very convenient list of abbreviations found in the initial pages of the former edition Many new terms, mostly arising from war conditions, have been added and defined. Spelling, pronunciation and derivation have been given the fullest consideration. Tables of poisons and antidotes, tests, stains and staining methods contribute very materially to the value of the work. In flexible binding of attractive appearance and convenient size it makes a book almost indispensable to the physicians table.

Arteriosclerosis and Hypertension; with chapter on Blood Pressure, by Louis M. Warfield, A. B., M. D., (Johns-Hopkins) F. A. C. P.; formerly Professor of Clinical Medicine, Marquette University Medical School; Chief Physician to Milwaukee County Hospital; Associate Member Association American Physicians; Member American Association Pathologists and Bacteriologists; American Medical Association, etc., Fellow American College of Physicians. Third edition. C. V. Mosby Co., St. Louis, 1920. Price, $4.00.

To this third edition a number of new figures and much new material have been added. The author claims this book represents largely his own ideas rather than much quoting from the literature on the subject which is a point well taken and seems to be well carried out. The chapter on Blolod Pressure "has been expanded and some original observations have been included, the literature selected rather than indiscriminately quoted" so that the statements more nearly correspond to what we now consider up to date knowledge. The illustrations are finely executed. The paper and the mechanical execution is very good and altogther the book is a very useful addition to the physician's armamenterium.

Hoisholt, Psychiatric, Neurologic Examination Methods. By Dr. August Wimmer, Director St. Haus Hospital, Near Copenhagen, Denmark. An authorized translation by Andrew W. Hoisholt, M. D., Medical Superintendent, Napa State Hospital; Professor of Psychiatry, Medical Department, Leland Stanford Junior University, San Francisco, California. C. V. Morby Co., St. Louis. 1919. Price, $2.00. While not by any means an exhaustive treatise on "diagnostics" we believe in this little book will be found a reliable, practi-

cal guide, useful to the American student in Psychiatry. Among other helpful things we note in the concluding paragraph of chapter second a series of Binet and Simon tests for the purpose of ascertaining whether the development of a child corresponds with what is considered normal for its age, something convenient and useful to the general practitioner as well as the specialist.

Medical Clinics of North America (Philadelphia Number, March, 1920.) Volume 111, No. 5, by Philadelphia Internists. Octavo of 325 pages with 26 illustrations. Issued serially, one volume every other month. Paper, $12.00; Cloth, $16.00 net. W. B. Saunders Company, Philadelphia and London.

This number of this useful publication comes to us filled with subjects of great importance as they embrace clinics and discussions on conditions occurring almost daily in the practice of the profession in general, among these we note report of the clinic by Dr Thos. McRae, Jefferson Hospital, on Low Blood Pressure; Dr. B. B. Vincent Lyon, Jefferson Hospital, on Some Aspects of the Diagnosis and Treatment of Cholesystitis and Cholelithiasis; Dr. E. J. G. Beardsley, Jefferson Hospital, on Chronic Valvular Disease of the Heart and Ethics Ideals and Efficiency in the Practice of Medicine. Dr. Alfred Stengel, University Hospital, on the Treatment of Valvular Disease of the Heart Before Failure of Compensation. Dr. David Preisman on Edema of the Lungs. Dr. H. R. McLandis, University Hospital, on Meningitis. Dr. Jno. H. Masser, Jr., Three Instructive Cases. Dr. Edward H. Goodman, University Hospital, on Significance of Heart Murmurs in Young Individuals. Dr. O. H. Perry Pepper, on Hodgkins with Jaundice as an early symptom. Dr. Jos. C. Doane, Philadelphia General Hospital, on Drug Inebriety, and a contribution by Dr. Jno. B. Deaver Lankeman Hospital, on Chronic Appendicitis. This last might well be styled "The Gospel of Appendicitis" which if well studied and digested is alone worth the price of the number.

Handbook of Diseases of the Rectum, by Louis J. Hirschman, M. D., F. A. C. S., vice-chairman Section of Gastro-Enterology and Proctology, A. M. A.; ex-President American Proctologic Society; Professor of Proctology, Detroit College of Medicine; Proctologist, Harper Hospital; Major, M. C., U. S. A. (honorably discharged), Detroit, U. S. A. Price, $5.00. C. V. Morby Co., St. Louis.

This is a well written, servicable book for the use of the general medical practitioner. The illustrating is well done and serves to exemplify the text. The technique of most of the operations under local anaesthesia is thoroughly detailed and the whole subject embraced under the title of the publication is comprehensively covered.

SEXUAL IMPOTENCE
New Sixth Edition

Sexual Impotetnce, by Victor G. Vecki, M. D., San Francisco, California. Sixth Edition. 12mo of 424 pages. Philadelphia and London. W. B. Saunders Company, 1920. Cloth, $3.00 net.

The diseased condition forming the subject of this book, together with some others, is now included under the head of "Urology", a compara-

tively new specialty in medicine, and the fact that the book has reached a sixth revised edition is ample proof of the popularity of the work. The revision as the author states in his preface was made largely under the sway of endocrinology and in-as-much as wonderful progress and important discoveries have recently been made along this line its value to the profession at large will be at once appreciated.

Report from Pathological Department, by Geo. F. Edenharter, M. D., Supt., on the Department of Clinical Psychiatry, Central Indiana Hospital for Insane, Vol. VII.

We have received the above report and believe that it fairly represents the efforts being made at this Institution to develop a high class teaching hospital and to deserve the co-operation of the medical profession. We believe it to be a movement in the right direction which should be appreciated at its worth to the profession in general.

MODERN SURGERY

Modern Surgery, General and Operative, by J. Chalmers Da Costa, M. D. Samuel D. Gross, Professor of Surgery, Jefferson Medical College, Philadelphia, Eighth Edition, Revised, Enlarged and Reset. Octavo of 1697 pages with 1177 illustrations, some of them in colors. Philadelphia and London. W. B. Saunders Company, 1919. Cloth, $8.00 net.

This, the eighth revised, enlarged and reset edition of Da Costa's well known work, has been undertaken and accomplished under unusual difficulties, having as the author's preface states occupied him for a long weary time, largely the result of war time stress. Whatever there may be of short coming in a small way does not detract materially from the usefulness of this product of a master mind. We note in this book the same tendency, as among other authors of very good book, to retain a very considerable amount of "dead wood" which might well have been eliminated, and that some points of what are considered up to date importance have not been touched upon. On the whole the teachings of Da Costa are well represented and this of itself is sufficient to recommend its use as a text book for the student and a guide for the practitioner. It will be found as heretofore one of our best books treating upon the subject under consideration and a valuable addition to any medical practitioner's library.

Propaganda for Reform

Green's Dropsy Remedy.—This "treatment is sold on the mail order plan and comes in the form of large balls or boluses, some smaller balls or boluses and, in some cases, includes Tonic Tablets." The balls are taken, followed by substantial doses of magnesium sulphate. The A. M. A. Chemical Laboratory reports that the boluses, large and small, appear to contain powdered squill as their chief medicinal ingredient. The laboratory further reports that the "Tonic Tablets" contain an iron salt, probably dried ferrous sulphate, as the chief medicinal ingredient. Obviously, there must be no small amount of danger for a person in a dropsical condition to dose and drastically purge himself. The product is one that has no legitimate place among home remedies (Jour. A. M. A., March 6, 1920, p. 689).

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MANIAC DEPRESSIVE PSYCHOSIS

By L. V. Guthrie, M. D.,
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Consulting Neuro-Psychiatrist U. S. P. H. S. (for West Virginia); Chairman the West Virginia Mental Hygiene Commission; Member American Medico-Psychological Association (Chairman Committee on Nursing); Psychiatrist Cabell County Lunacy Commission, Etc.

Read at the Fifty-third Annual Meeting of the State Medical Association, Parkersburg, W. Va., May 18, 1920.

Perhaps the most ancient form of insanity, so far as literature reveals it to us, would have been classed in modern day terminology as the Manic Depressive type.

The Old Testament referred to mania and madness and from the description given it was not an infrequent disease during that period of human history that dates back to the early man.

In olden times it seems the line of demarkation was not always drawn between those really mad and those inspired. Nor must we lose sight of the clinical fact in this connection that mania and inspiration might be combined in the same individual.

Jeremiah some 700 years B. C., while under the influence of prophetic inspiration, did many things that would place him under suspicion as to his mental soundness if he performed the same feats today. His actions and the fact that he lived to be about 85 years of age would lead us to believe that if he was suffering with a psychosis it was Manic Depressive instead of Paresis or Dementia Praecox.

It is, of course, somewhat speculative as to the probable diagnosis in the case of Nebuchadnezzar with his abnormal behavior and with the reputed recovery of his "insight and ability," but it was probably Manic Depressive Psychosis.

Ezekiel died as a comparatively young man, but he was very queer both in method and action and he may have had some other form of mental impairment.

Was it possible in these early times that the sperrochaeta pallida interfered with the functions of the neuron in some of these individuals?

The individual with Manic Depressive Psychosis in some of its forms is more like the normal individual than when suffering from any other form of insanity with the exception of Paranoia. Their likes and dislikes are frequently difficult to distinguish from those of the normal individual. Their power to conceal or cover their real thoughts is frequently a noticeable characteristic; and, even when violently insane and when their understanding has been apparently obliterated on many subjects, it is truly astonishing to discern the spark of intellect that may yet remain concealed under the surface.

The English law dealing with insanity held that the test of the individual's responsibility was his ability to know right from wrong and his ability to distinguish the nature and quality of his acts. Such a test can scarcely be reconciled with the clinical data in many cases of Manic Depressive Insanity.

ETIOLOGY

In our present lack of illumination as to just what causes Manic Depressive Psychosis and our meagre knowledge of its pathology the disease may be for the present defined as a functional psychosis and its characteristic symptoms, mental depression alternation with exaltation. Etiology places heredity at the head of the list, charging more than 80 percent of the cases to neuropathic or psychopathic ancestors. We are not told just what these patients inherit, but there is a leading suggestion found in most literature on the subject that there is an inherent weakness or instability of the neuron. Very recently there has been a hint that possibly there is an endogenous toxin in some manner responsible for the symptoms. For more than twenty years I have felt that the time would come when the exact toxin or endocrinological disturbance would be clearly understood.

Age plays some part as a predisposing cause and we find this disease usually appearing between twenty and thirty. This does not by any means hold good for all cases for it may occur earlier in life and frequently does occur after thirty years of age, but the third decade —that period of development of greatest changes and stress—covers the majority of cases met with. My experience has shown more men than women with Mania and the reverse with Melancholia. With the latter I have treated twice as many women as men. Grief, stress, excitement, religious or otherwise, environment and antecedent diseases which have placed the patient's general health below par, all have a bearing upon the production of this form of insanity.

PATHOLOGY

Our text-books on Insanity furnish a very clear clinical picture of the many and various forms of this disease, but we are usually completely at sea when we consider the pathology. It is almost as much of an unchartered ocean as was the western Atlantic at the time Christopher Columbus beseeched Queen Isabelle to finance his expedition.

It remains to be seen whose name will be coupled with this important discovery in pathology which will tell us the exact cause and nature of one of the greatest blights to humanity.

For the purpose of studying pathology in this and one other form of insanity, I recently requested the Executive Committee of the Rockefeller Foundation Fund to send a first-class Biological

Chemist to the Huntington State Hospital where there is an abundance of clinical material. This institution also has the advantage of having a certain number of nearly normal individuals on whom harmless experiments can be tried out. I thought, with the vast financial resources of the Rockefeller Fund and with the opportunities that the Huntington State Hospital can afford for experiments and study, that surely something could be ascertained as to the pathology and causes of this form of mental disease. What I wanted was a Biological Chemist who was not afraid to stray from the beaten path in his experiments. I regret exceedingly that the reply to my request was that assistance could be furnished only to Universities, centers of learning, but not to hospitals such as I represent. From my viewpoint of making a scientific study where clinical material was abundant, sending a Biological Chemist to our State University would be parallel to giving the small boy permission to go fishing in the family bath tub.

In attempting to fully understand this disease in its many sided features we must constantly keep in our minds the numerous variations in the symptom complex.

We describe an understandable range in temperatures when we say from the boiling point when hot to the freezing point when cold, and the variations in symptoms included within the term Manic Depressive Psychosis is almost as significant, with the delirious mania for a high point in the Manic Phase to the Depressive stupor or Acute Melancholia in the Depressive Phase for the low point, and the Hypo-Manias, Hypo-Melancholia, Cyclothymias, etc., coming in some place half-way between. A celebrated pickle manufacturer with his 57 varieties has very little the advantage of the wide range in types found in this disease, and we are not presuming too much when prophesying that future prolific writers will invent new terms and types from time to time.

The six cardinal symptoms conveniently arranged for clearness gives us (1) Psychomotor hyper-activity; (2) Emotional exaltation and (3) Flight of ideas in the Manic Phase, with just the opposite in the Depressive Phase, namely: (1) Psychomotor retardation; (2) Emotional depression and (3) Poverty in thought. This does not necessarily mean that if the pendulum swings far to the right in any one cardinal symptom on the Manic side that it will swing equally as far to the left on the Depressive side, for there are many degrees and variations and special groups of symptoms in individuals and in the same individual, some patients tending toward pronounced symptoms in the Manic group and others having for their predominate symptoms those belonging to the Depressive Phase. The determining factor seems to be the patient's temperament when in health, and his environment. Those individuals who have been quiet and solemn in demeanor are more inclined to have the Depressive Phase pronounced. Those of more cheerful disposition are apt to have the Manic Phase in one or more of its various degrees.

While Kraeplin gave us the first clear conception and has saved untold confusion in classification compared with a quarter of a century ago, we should not anchor our thoughts to the belief that the above schematic arrangement holds good in all cases for there are many Mixed States found in actual practice—states in which, so to speak, the wires become crossed. To illustrate, we have a depres-

sion with flight of ideas, or we may have Akinetic Mania — exaltation with decreased Psychomotor activity, etc.

It can be easily seen that the physician, who enjoys variety of symptoms, with a dozen or two cases of Manic Depressive Insanity will not find practice monotonous.

It is not the purpose of this paper to give a classical description of Manic Depressive Psychosis; that may be obtained in our standard text-books on mental diseases. However, I wish to call your attention to the various types met with from time to time in general practice and daily in hospitals for the insane.

The Cyclothymias. In this type the deviation from normal psychological fluctuations is so slight that the patient's condition may be overlooked and misunderstood by the casual observer, or on the other hand the over-enthusiastic psychiatrist may look with suspicion on the individual who has the "blues" one day and chances to be cheerful and buoyant at another time.

In the Depressed Phase or dysthymic type the clinical picture may, and usually does, "cloak" itself with physical symptoms, the patient complaining of gastro intestinal ailments, cardiac symptoms, etc., and give these as the cause of mental depression. Some of these patients have neurasthenic symptoms and are inclined to pass from one physician to another and fall easy victims to the "quack." Exaggerated activities deficient in integration usually characterize the stage of excitement known as the Hyperthymic type.

The next type in severity is Hypomania with the three cardinal symptoms elsewhere referred to. The Manic symptoms are quite mild and the disease may be diagnosed with great difficulty and only after considerable time and observation have been devoted to the patient. These patients upon superficial examination, or when examined before a jury of laymen are capable of making a good impression, and I recall a case of this kind tried in one of our counties in West Virginia a few years ago and some of the spectators remarked to me that "The prisoner (patient) was more brilliant than the doctors and lawyers who were trying to take away his liberty." He ultimately, after squandering many thousands of dollars and wrecking the lives of his "next in kin," blew out his brains with a revolver and finally convinced his so-called friends that after all he was really insane. It is to be noted that this superficial brilliancy or mental activity is seldom accompanied with logical deductions or sound reasoning.

In Hypo-melancholia we have, as indicated elsewhere in this paper, three cardinal symptoms varying in degree and selection determined largely upon the patient's temperament and environment. With the emotional depression, psychomotor retardation, poverty in thought the diagnosis is quite a simple matter if the full history of the case is carefully studied and compared with a complete history of the patient's previous life and present illness.

The somatic symptoms in these cases clear up in proportion to the improvement in their mental derangement. Outside of the exaggerated symptoms in their imaginary diseases these patients may have no marked delusions or disturbances of the sensorium. This abnormal mental state like its "cousin," the well-developed type of Manic Depressive Psychosis may predominate in symptomology on the depressive side, Hypomelancholia, or it may be most pronounced in the Hypo-manic type. In

the depressed type as well as in the Hypomanic, the victims may crave stimulants and readily take to alcoholics. This frequently accounts for some of the periodical drunkards met with. Great indiscretions are frequently committed by these patients and the entire neighborhood may be shocked by bold solicitations of a woman who has heretofore been modest and well-behaved.

The above types—Hypo-mania, Hypomelancholia and cyclothymia nearly always cause great worry and annoyance to their relatives, and usually add much responsibility to the management of a hospital if admitted thereto. With their admixture of sanity and insanity, their tendency to get into trouble, to meddle with the affairs of others and their abnormal sexual tendencies and lack of propriety, their impulsiveness and their failure in adjustment, we frequently have more annoyance from these milder types than with some of the more severe forms of insanity.

The next form — Acute Mania — we have the three cardinal groups of symptoms in the Manic Phase exaggerated and fully developed. The patient is in almost constant motion day and night; he sings, preaches or yells, destroys his bedding and clothing, frequently refuses food, or may have a ravenous appetite. Is frequently incoherent in conversation, will seldom ask for drinking water but will usually drink if it is offered; bowels are inclined to constipation, urine is often highly colored and shows concentration. The patient with Acute Mania seldom secures sufficient sleep. Nearly all of these patients are untidy and filthy in their personal habits and not infrequently they besmear their heads and bodies, and floors and walls of their rooms with excrement. There is frequently a tendency to be pugnacious and homicidal, and not infrequently the patient with Acute Mania attacks those with whom he comes in contact and in these encounters the most brutal methods may be resorted to by the mad man. The unfortunate patient often bruises himself staggering around the room, jumping off the bed and window sills, etc. It is this form of insanity that the "Insane Ear," a hypertrophy of the external ear was so often seen a few years ago in asylums for the insane, and it was especially met with in patients whose Acute Mania had been prolonged into a chronic stage.

From the above it would seem that this is the form of insanity that has molded the popular conception of the maniac, and some people do not seem to realize that an individual is insane unless he shows some of these pronounced signs and symptoms. It is this type of patient that causes untold trouble and responsibility to those who have been entrusted with his care. From the relatives' standpoint it may be perfectly proper for the patient to attack the nurse, doctor or other patient, but if the relative finds the patient with a bruise or a scratch, it is another matter. The patient may have "cleaned up" on the household before having been admitted and the patient may have many extensive bruises on his body as the result of his encounter with the home folks, and it may be necessary, in order to deliver him to the hospital, to use handcuffs and tie him with ropes. Some of these patients upon being received at a hospital for the insane have the general appearance of having gotten the "worst of it" in a ten-round prize fight, and the guard and friends would tell us how vicious and homicidal was the attack by the crazy man when at home. There is never any trouble on the part of the suspicious

relatives to understand these encounters and the accompanying bruises so long as it is done by their own hands at home or enroute to the hospital, but if they by chance visit the patient later on and find him with a scratch or bruise received while giving a bath or giving him a hot pack, it is a serious matter and should be investigated.

One thing in this connection we must keep in mind, and that is, if the vicious homicidal maniac gets the upper hand in the encounter and assistance is tardy there may be a death.

Patients with Acute Mania whose symptoms are pronounced lose flesh and may wear themselves out with loss of sleep, refusal to eat and psychomotor hyper-activity and excitement; but, after the first acute symptoms have subsided or if the patient has had a mild attack he may gain in weight. A gain in weight, if accompanied with an improvement in mental condition, is a favorable sign.

Delirious Mania may be properly mentioned as the next in severity and seriousness in our consideration of this disease, and it is characterized by incoherent conversation and a more pronounced clouding in consciousness. The patient loses strength rapidly and his ravings may soon come in husky whispers. He has the appearance of a patient who is profoundly toxic. Cutaneous scratches and abraisons which are common in this as in the preceding form, frequently become infected and even when properly dressed suppuration may become a serious complication owing to the patient's lack of co-operation and his lowered resistance. Sepsis may change the clinical picture. Retention of urine and intestinal stasis are frequently met with, the tongue is heavily coated and in color a dark gray or brown; the breath is very offensive, the saliva and secretions in throat frequently become scanty and ropy. There is little, if any, desire for food. It is more than probable that some of these conditions are exaggerated from heavy dosing with morphine or other narcotics in an effort to obtain sleep for the patient and quiet for the balance of the household. If the patient lives a week or two after becoming bedfast, bed sores usually develop. Serious complications may be overlooked by the attending physician owing to the difficulty in making a thorough physical examination.

ACUTE MELANCHOLIA

Reference has already been made in the preceding pages to the mild depressive type—Hypo-melancholia, etc., and as the pendulum swings away from the high point just briefly described on the Manic side, we find for the purpose of this paper in considering the corresponding Depressive Phase, Acute Melancholia.

Here we encounter the three cardinal symptoms diametrically opposed to those just described in the Manic Phase. Instead of emotional exaltation there is emotional depression; there is no psychomotor hyper-activity but we find psychomotor retardation; the flight of ideas or rapid association processes here give way to great difficulty in thinking—poverty in thought—and what thought there is has a depressed and painful trend. When this group of symptoms is very mild it is known as Cyclothymia dysthymic type and if somewhat more severe but not pronounced, as hypomelancholia, and if fully developed, as melancholia. Here we encounter the three cardinal symptoms unmistakably developed. The patient is inactive, having practically no interest in her surroundings; initiative may be practically nil. The emotions are greatly de-

pressed as can be clearly seen in the patient's countenance and posture. Her mental activity is so sluggish and deficient that the patient is not able to carry out conclusive mental acts or form logical conclusions. The unhappy victim firmly believes that she has committed some great sin; that her soul is lost and that she will be eternally damned. Hallucinations are common and self-accusatory delusions are found in all well-developed cases. The delusions, in my experience, are never persecutory in character as found in paranoia and the paranoid states. Whether it be illusions, delusions or hallucinations, or all three combined it is invariably of a depressed, painful or horrible character. Clouston's term Psychalgia is very appropriate in the mental suffering as seen in the patient's countenance.

The arterial tension is lowered and gastro intestinal atony is present and the physical as well as the mental picture is one of profound depression. The urine is usually scanty, high in specific gravity and decomposes rapidly when exposed to the air. In women, menstruation ceases during the height of the disease.

The diagnosis in uncomplicated and typical cases is quite a simple matter, the only difficulty met with is in Mixed States and atypical conditions.

Dementia Praecox in some of its forms may cause confusion, but the shizophrenic character of the delusions, their tendency to change from day to day and the fact that they do not have the unpardonable sin, unworthiness, self-accusation, characteristics found in the depressed type of Manic Depressive Insanity should clear up any doubt as to diagnosis, and the Manic Phase does not show the mannerisms, stereotype movements and catatonia signs found in Dementia Praecox.

Some patients with the Manic Phase show great exaltation and may simulate grandiose symptoms found in Paresis, but the history of the case, pupillary changes, positive Romberg, reflexes and other physical signs with the manner of speech found in Paresis should clear up any doubt, especially if spinal and blood Wassermanns are positive in connection with the above signs. On the other hand we should not diagnose the case as Paresis without some of the above physical signs on account of the Wassermann being positive, for the syphilitic infection may be incidental to the Mania and have nothing to do with the insanity.

PROGNOSIS

Generally speaking, the outlook for recovery from the individual attack is good and fully 75 percent of the cases of average severity, if uncomplicated, are restored to practically their previous mental condition, but in Involution Melancholia the percent is not so favorable. Only about 30 percent rercover.

OUTLINE OF TREATMENT

The course to be pursued in treatment and management of the mild type is frequently more difficult to determine than in the severe cases. The patient may seem so lucid and well-conducted, at times, in the usual affairs of life that the physician and family naturally hesitate in sending the patient to a Psychopathic hospital; however, it is well to remember that appearances may be very deceptive; that suicide is always a possibility if there is depression, and that hypo-mania also has its corresponding dangers not only to the patient himself but to others around him, as he has great capacity for getting into trouble with his associates, with "wine and women" and even in the hypo-manic stage there is never any as-

surance that the Depressive Phase will not develop and that self-destruction will not be attempted.

During the Manic Phase when symptoms are pronounced, our attention and efforts should be devoted to maintaining the patient's general health. Liberal diet, even if tube or forced feeding is necessary. If the patient is up and about and has a desire for food the diet should be in variety with considerable rough food, such as kale, string beans, vegetables, etc. Sufficient sleep is important and this is encouraged by placing the patient where the surroundings are quiet and conducive to sleep; frequently a hot pack for 30 to 40 minutes before bedtime, or the continuous flow bath at 98 degrees Fahrenheit for an hour will give the patient refreshing sleep. In giving the continuous flow bath a tub constructed especially for this purpose should be used if possible, but the patient's pulse and general condition should be carefully watched, and especially if the patient is feeble or has had considerable dosing with chloral or other hypnotic. Morphine and hyoscine are seldom satisfactory in these cases and if a quieting drug is absolutely necessary as a chemical restraint, or to procure sleep, I prefer Bromide of Soda with Veronol, or the Bromide with Chloral. In selected cases, trional and sulphonol are useful. Paraldehyde is also of value in mild cases, but its action in ordinary sized doses is of short duration. Elimination must be carefully looked after and the patient encouraged to drink large quantities of water, and mild salines administered from time to time. An occasional dose of calomel or Pill C. C. U. S. P., may frequently be given to advantage. Mechanical restraint may be necessary for short intervals in the highly excited cases, but it frequently exasperates the patient and makes him more violent than when he is allowed privileges in a small comfortable room. It is advisable to remove all unnecessary furniture from the room before the patient is placed in this seclusion. With quiet surroundings and tact on the part of the attendants and nurses and frequent use of the continuous flow bath it is seldom necessary to resort to mechanical restraint. All of these patients with Acute Mania and those whose makeup predisposes them to attacks, bear alcoholic drinks badly.

The patient's teeth should be carefully examined and if there is a possible source of infection, that should be removed. This also applies to the tonsils primaeviae and other portions of the body.

Patients with the Depressive Phase should, as elsewhere stated, be carefully looked after with the view of preventing suicide and it is important that the patient have no knowledge or suggestion of this surveillance. Many of these patients who are improving and apparently on the road to recovery are given relapses by visits from home folks, or a letter containing bad or disagreeable news.

The above principles of treatment are applicable to the depressed as well as the Manic Phase. They are also applicable to the stuporous or delirious forms with special attention toward maintaining the patient's general health in good condition. For the diet in the latter conditions, milk, poached eggs and raw eggs are usually best. If we must use the tube, raw eggs, milk, beef juice, etc., are the most useful, and special attention must be directed to see that the patient secures sufficient drinking water. Normal saline solution per rectum is also indicated in many cases, and bed sores should be guarded against, if possible.

After recovery the patient should lead a life free from excitement and worry and the physical health carefully guarded.

Marriage and procreation should not be undertaken in persons who have suffered with Maniac Depressive Psychosis, or those who have a marked neuro-psychopathic predispostion, without fully considering the grave responsibility.

MICROBES AND MEN

By DR. W. W. BROWN,
Shenandoah Junction, W. Va.

Read Before West Virginia State Medical Association, Parkersburg, May, 1920.

I am indebted to Dr. John T. Morris for the title of this paper.

In reference to the subject, I would say, we recognize microbes good, bad, glad and sad. Surely we could not enter this world without their aid, surely we could not grow without their help, and it is a dead sure thing we could not die without their influence. Mainly, however, we shall speak of bad microbes and good men.

The opposing forces: The field of Nature and Life is one of fighting forces, of struggling powers. It is the microbe against the body cell; man against his fellow; party against party; government against government; race against race in the great effort to reach the goal of the survival of the fittest, and the power of these forces should be well balanced. For instance, on the question of Capital and Labor, we think our lawmakers should aim to bring about a healthy antagonism rather than effect a co-operation, that is for the good of all.

This struggle of life began in the Garden of Eden. Let me quote the Bible: Genesis 111:14-15—"And the Lord said unto the serpent, 'Because thou hast done this, thou art cursed above all cattle, and above every beast of the field; upon thy belly thou shalt go, and dust shalt thou eat all the days of thy life; and I will put enmity between thee and the woman, and between thy seed and her seed; it shall bruise thy head, and thou shalt bruise his heel.'"

I feel that the theologians will forgive the statement that the serpent referred to here is the microbe, when it is known that all the authority the writer has in this belief comes from his own crude and uninformed mind. At any rate, no armistice or treaty of peace can settle this dispute; it is war to the death.

EPIDEMICS

From the beginning we have had epidemics: Epidemics of Men, Wars, Epidemics of Disease, Microbes that have swept over the world, destroying nations, races and peoples. Quite recently we have had an epidemic of both men and disease, that have slain millions. The epidemic of men coming in two obsessions—blood and money madness—one the cause of the war, the other the result, but both due to the microbe.

Primitive warfare had an eugenic effect, as it often removed the unfit. The microbe as nature's agent of destruction has the same effect, but in modern warfare the fittest, the best breeders, the stalwarts lie in "Flander's fields where poppies blow between the crosses, row on row."

The great slaughterer: In all epidemics of men, King Microbe accompanies and follows Mars, the god of war, as he is the great camp follower of the ages, and kills about eight to one who

dies from battle injuries. In our Civil War the Federal army lost 90,000 in battle and 190,000 from disease, and in the Confederate army the proportion of deaths was greater, as they had no medicine and but little food and clothing. It is said that President Lincoln shed tears when informed of the number of his men killed at the Battle of Manassas by the god of war, yet he had lost infinitely more by King Microbe, with but very little comment. Other forces, however, are arriving on the field—the modern god Aesculapius, armed with the implements of his craft, weapons of offense and defense. The god is accompanied by his favorite daughter Hygeia and the army nurse Minerva: these two goddesses are clothed in white, each with a red cross on her forehead, on her arm and in her heart. Both of these girls favor Woman's Suffrage as they know they can clean house to the discomfort of man and believe they can clean politics, also to the discomfort of man. After all, the burden of destroying the microbe is put upon the woman. "And I will put enmity between thee and the woman, and between thy seed and her seed; it shall bruise thy head, and thou shall bruise his heel."

This trio is guided over the battle fields of life by the Man of Galilee, and the mission of this Man of Galilee was to cure disease, as disease, was abhorent to Him. His followers believed that disease was due to the power of the devil or devils, as his biographers inform us. In other words, his mission was to restore the fellowship and communion with the Father God that had been lost by the fall of man.

The god Aesculapius and the two handmaidens are authority for the information that in our last world war an equal number died from battle injuries and disease, particularly in the American army, 50,000 each, that of all the wounded ninety percent were sent back to the ranks or restored to their homes. They also give the additional information that many diseases are made preventable, typhoid fever for instance; many curable, tuberculosis for instance; many are running out, cholera and yellow fever for instance; whilst the toxins of others have split into groups producing a mixed and less fatal infection, scarlet fever for instance. Refering briefly to the epidemic of "Flu" we had eighteen months ago and the recurrent one of last winter, we would say that treating the symptoms only, although it was advocated by the journals and practiced by the men who wore leather leggins, was about as logical as the treatment given General Washington by his physicians for a case of common laryngitis — by plastering his legs with mush poultices. No wonder the old general got "cold feet," after his repeated bleedings. "Notwithstanding our repeated bleedings, our distinguished patient sank." Still speaking about the "Flu," we will contend that the old woman with her boneset tea and onion poultice got about as good result as the man with his laboratory products.

Will epidemics of men and disease cease? At least they will be farther and farther apart as science advances and the spirit of the Christ progresses, when the biology of war as well as that of medicine is better understood. How? First, by the possession of the "International Mind," the formation of international bodies, as the League of Nations, the International Board of Health, a World Church Alliance, etc., the pushing forward of our nation as the spiritual leader and scientific authority of the world; in the creation of a Department

of Health with a chair in the President's Cabinet, occupied by a doctor of active practice and common sense. Second, by making an aggressive fight against his Majesty, the Microbe, meeting specific attacks with specific remedies, making the body immune by strengthening the body cells' power of resistance. Boycott the King by taking his food from him, remembering he fights from without as a guerilla in ambush, and from within as an assassin, hidden in the mouth, lungs, colon and every place where he can wield a knife or shoot a dart; as a robber he takes care of his own larder, and as a militarist, he believes in the acquisition of territory and a strong indemnity. Third, by taking due notice of the protective organs, the ductless glands, as they are the silent sentinels that keep guard over the sleeping army, the ships that carry the American Legion over the waters that the world might be made safe for Democracy, the thyroid being the flag ship of the fleet. So the fight goes merrily along—here a victory, there a defeat. Shall we win? True we know men die and worms do eat them, and our enemy is a king—the wily serpent. Still we have the promise in Holy Writ, "And I will put enmity between thee and the woman, and between thy seed and her seed; it shall bruise thy head and thou shall bruise his heel."

THE CANCER PROBLEM

By DR. FRANK LEMOYNE HUPP,
Chairman West Virginia Branch of the American Society for the Control of Cancer.

Within the expanded range of medical affairs there is no subject of more vital concern or no more pressing problem at this moment to be dealt with than this question of our present knowledge, the cause, the early recognition and the prevention of cancer.

As far as my voice can reach I would here and now urge every component county society of this Association to see to it that this problem receives in the next twelve month the most earnest consideration, if you hold sacred and have a reasonable regard for your own health and that of your brother man.

It is high time for a state awakening. Did it ever occur to you that if every man and woman in any audience who has passed the forty year limit was counted and that number divided by ten you would have the number of persons in that assembly who, sooner or later, will be claimed by this scourge cancer?

Those of you who attended the last meeting of the surgical congress in New York well remember the sledge hammer blows given this subject by the President, Dr. Will Mayo.

One need not have lived very long ago to recall how dyspepsia was counted the ban of American diseases. Now we seldom hear of purely functional digestive disturbances of a serious nature. Better food, healthier teeth, more barnyard sense has corrected this.

In the same way we have progressed out of the era, not so ancient, when typhoid occupied the chief place in our fears. We used to hear about a thousand miles of Ohio river and a thousand miles of typhoid; inoculation and education has wiped this disease practically out of our hospitals. Appendicitis, once so highly mortal, has yielded to early recognition, and the aseptic scalpel. New methods of diabetic treatment have largely removed a menace that formerly thwarted the efforts of the internist and abridged the lives of many a short decade ago. Even that which used to be

called the Great White Plague has been circumscribed in its ravages by sanitary housing, education, segregation, and restorative care. The secrets of venereal disease have been yielded up.

It has been made evident here today that the next problem we as physicians have to face and solve is this unconquered Cancer, with its appalling annual mortality of almost 100,000 souls in this country. You men are to be the workers in the mint—in the words of the lamented Osler—you are to shape for use the pure gold wrought in the laboratories by the miners of science. You are to help educate the millions of untutored laymen. With your assistance the searchlight of publicity, education and propaganda will cut in twain this high mortality. Under your directorship the condemning finger of scorn will be pointed at this demon tormentor, not only to illumine the mind and satisfy the conscience, but to point with unerring accuracy the way for those of the public who have been misled through ignorance in the past.

Repeat to them what we as physicians know to be true that Cancer is

Not hereditary
Not contagious
Not infectious.

That it can be prevented and cured if taken early. Urge the people to avoid irritating the stomach with hot drinks and burning hot food.

Tell the smoker of the irritating effect of the rough pipe and the rubbing of the rolled tobacco leaf.

Tell the dentist to see to it that no rough tooth is to be turned uncorrected from his office, if he would spare the tongue an almost inevitable malignancy.

Tell the unsuspecting mothers and women in general that the lump in the breast and the irregular bleeding is a menace. That the bleeding wart and the pressure sore on the nose must be investigated.

Give them a message of hope with all firmness and without equivocation or indecision.

Don't let your anchors drag—but sail on and tell the truth as we know it.

Certainly such straightforward teaching from you men of medicine will open up the one great chance for the public to keep itself relatively free from one of the most distressing ailments that remain unconquered among us.

We have launched here in this commonwealth of West Virginia a campaign against Cancer. There has been established a branch of the American Society for the Control of Cancer. Sub-committees are already at work in ten of our leading cities, and we earnestly urge and invite the co-operation of every wide awake man of medicine, for it is by you, my friends, this gospel of hope and prevention and education is to be preached, and through your untiring efforts that the appalling mortality is to be lowered.

Let us profit by and be grateful for the wisdom and guidance brought to us by the distinguished prophets of our art at the recent meeting of our State Association. Let us get busy, for in solidarity of purpose and action we have a strength far greater than any other agency. By waging this great battle for right and humanity we will but uphold the tenets and traditions of a glorious profession.

THE PHYSICIAN AND THE HOSPITAL

By H. E. GAYNOR, M. D.,
Parkersburg, W. Va.

Read at Meeting of the West Virginia Hospital Association, Parkersburg, May 20th, 1920.

In the selection of this subject I have been guided solely by observation extending over a period of fifteen years. In pursuing the literature relative to same, I find much to my disappointment and chagrin, that considerable has been written in the abstract, but not in the concrete on this caption.

Personally, I consider the physician and the hospital so closely interwoven one with the other that they are inseparable, indivisible—a more succinct term to my mind would be an integral part of the unity. While it is true that the physician antedates the hospital by many centuries, still we members of the medical profession are amazed that our predecessors could have achieved what they did without the assistance of the hospital. Hospitals date back almost to the Middle age, but the truly modern institution is practically an achievement of the last century; still in its infancy, but advancing with rapid pace both in construction and administration. The part they play today in the care of the sick and advancement of medical science is beyond the conception of the untrained lay mind. We, the physicians, are responsible in no small measure for their growth and advancement. Upon our shoulders, for the greater part, rests the responsibility for the management and advancement; especially true, since the standardization of the hospitals of this country and Canada has been instituted, hospital associations formed, staffs selected and every means devised by human intelligence for the betterment of the institutions of this country and Canada, have been acted upon in an expeditious and scientific manner.

The task was a gigantic proposition, and much still remains for us to do. Shall we now be laggards in the vineyard of our Master, or on the other hand, shall we be up and doing, with a heart for any task, still achieving, still pursuing, learn to labor, not to wait?

There are a number of practical points of vital importance to the subject under consideration, that I will take up now and consider briefly: 1st. The patient. 2nd. The doctor (relative to his practice in the institution. 3rd. The nurse (graduate and under-graduate). 4th. Management. 5th. Organization. 6th. Ethics. And from these naturally flows harmony of united action.

First. The patient stands out prominently above everything else—this should be the slogan of every institution, wherever it is located, the welfare of the patient, regardless of cost or labor. Results are what count and therefore nothing should be neglected or overlooked that may promote the happiness or welfare of the patient. Every detail grows out of the need of the patient. It calls for a high degree of intelligence on the part of all connected with the institution, it demands earnestness, good will and an accentuated spirit of co-operation on the part of all; it must possess as its absolute prerequisite conscientious devotion towards the patient in the performance of every detail that is accomplished in the hospital; it formulates in the hearts and minds of the medical men, nurse, or hospital workers, regardless of status, an active spirit of progress and expansion. A determined effort for betterment and

improvement, always aiming upward and forward towards the ultimate goal of successful achievement, its final object is not for modification or radical change in hospital procedure, but, rather a gradual transition towards the higher standard; it considers only the trueness in the principles and betterment in the practice that governs the motives of those engaged in medical institutional service. Therefore, first of all, it impresses its indelible influence upon the mind and character of the profression. The nurse is included in its inexorable demands and its call is heard by the hospital management to face with unflinching fortitude the moral responsibility that rests upon it; to secure the very best service for every patient—man, woman, child—within its portals.

Second. The Doctor. I am prone to admit that I now experience a feeling somewhat akin to embarrassment, but I will endeavor to delineate to the best of my ability what a physician should be, in his relations with the hospital. His first and greatest attribute, as Lord Chesterfield would have it, is that of a gentleman; as you are aware that embraces practically everything except professional ability. If he measures up to Chesterfield's standard he will be courteous, chivalrous, self-sacrificing, energetic, ambitious and ethical. His moral character above reproach. As a physician, his skill should be that of his confreres, measuring up to the standard that prevails in the vicinity in which he is located. He should be a warm friend, and ardent defender of the institutions in his locality; fair and impartial in his judgment of their respective standards, and not permit personal, political or religious prejudice to influence his opinion of said hospital. He should obey verbatim the rules and regulations governing said institution; respect the position and authority of those in charge. Live and work in harmony with his associates; council with them; discuss important cases, etc.; impart to them the benefit of his experience. Accept the younger and inexperienced embryo physicians into the fold; cordially welcome him with a true fraternal affection; throw out to him the life-line of good fellowship; lessen for him the burdens that an unkind, unsympathetic world will soon cast upon him.

Be ethical. It is said, "That there is honor even among vagabonds." Let this be said of the profession in their mutual relations. Be courteous and polite with the nurses in the institution; they possess feelings; respect same, and do not forget the old adage, "Familiarity breeds contempt." When you have completed your work in the hospital leave the institution as soon as possible. If you are not busy, perhaps the nurse is; do not waste her time; it belongs not to you, nor to her, but is the property of the patient and the institution. Attend staff meetings regularly and punctually, engage in the discussions, in such a manner as to convey the impression that you are interested. If tendered, accept an appointment on the teaching staff of the training school, and endeavor to make your lectures not only instructive but interesting. This can only be accomplished by entering upon said task with a cheerful and complacent spirit; it will be sacrifice; but do not convert same into a burden by trying to evade your responsibility. If you have any complaints to register, do so to the proper authorities; do not air your opinions of fanciful wrongs, or discriminations on the part of the hospital management, to the public. Perhaps they may be better acquainted with the facts in the case than

you are aware of. In brief—they know you. If this general outline is respected and acted upon institutional work will advance, and you will reap the reward of your co-operative action, my men of medicine.

Third. Nurse (Graduate and Under-Graduate). Her first and paramount duty is to the patient. Her disposition should be in keeping with her vocation; she should avoid extremes, i. e., neither should she be boisterous, nor should she be taciturn; a happy medium is the ideal. Clean, scrupulously clean in person. Immaculate in dress. Readily obeying the commands of her superiors without complaint; kind, courteous, cordial and considerate in her relations with all with whom she comes in contact. Graduate nurses should advise, admonish (if deemed necessary) the under-graduate; but never be offensive or officious in her manner to the student-nurse. She must not lose sight of the fact that she was once in training.

Council with her, sympathize if the occasion presents itself. Your moral character should be above reproach, for many are the temptations that beset you; be on the qui vive at all times, ever on the alert to protect your virtue and your honor. Once lost, never regained. Student nurse should solicit the advice of her senior; confide in her, when in doubt; she will succor you and do so cheerfully, if you approach her in the proper manner.

Request the physician practicing in the hospital to write their orders when same is practical, thereby eliminating misunderstandings, etc. Be ethical in your professional duties; never advise a change of physician to your patient, unless prompted by good and sufficient reason; cultivate the friendship and esteem of all those practicing in your community; defend them when they are maligned. Speech is silver, silence is golden; in other words, forget not, that there are many conversations, many secrets that will pass from patient to nurse, from doctor to nurse, that must not be repeated. Be not too prone to furnish the press with all the latest hospital gossip; they will misquote and garble your statements, and perhaps cause someone considerable mental anguish. Never prescribe for a patient, unless in emergency, or suggest to the physician how the case should be treated. If he desires you to make a diagnosis or treat the case, he will make his desires known. Discharge your duties promptly and expeditiously; do not procrastinate; avoid haste, for haste makes waste. Your time, as mentioned before, belongs to the patient and the institution. If not rewarded in this world you will be in the Land beyond the Sun. There the Divine Master will pronounce over you these words of benediction: "Well done, My good and faithful servant."

Fourth. Management. One recognized head, whether same be designated as superintendent, matron or Mother Superior, acting in conjunction with an advisory board, as elected from the staff, or board of directors. This is now considered the logical mode of administration. The chief administrator should possess managerial and executive ability of marked pre-eminence. Be able to govern and administrate with discretion gained from experience. Be a martinet with her subordinates, but temper same with justice and kindness. Should not countenance wastefulness or extravagance, neither sin on the side of penuriousness. Ethical in all her relations with the profession, partial to none, but courteous and considerate to all.

Institution should be equipped in the best possible manner, i. e., in accordance with funds available for that purpose; service excellent, telephone calls should be answered with dispatch; emergency cases handled expeditiously, and nothing ovrlooked that may alleviate the suffering of the afflicted, or perhaps save a life. Meetings of the hospital workers should occur at frequent intervals and plans devised for betterment of institutional work acted upon, and all, from the highest to the lowest, be instilled with the idea that they are a very important cog in the machinery, and without their active co-operation the hospital will lack that harmony of united actions, on which the success of the institution depends.

Fifth. Organization. As the standard has been worked out by others in an eminently satisfactory manner, little is left for me to say on this all important subject. Suffice to state that whatever plan you adopt should be in keeping with the institution you represent and the physicians practicing in your domain. Public institutions should not consider the closed staff, but private and semi-private may. Personally, I doubt whether in the smaller cities and towns it is feasible; nevertheless, it has been adopted by some. Standardize your institution for the day is not far distant when the lay public will demand that you do.

Sixth. Ethics. This division of the subject has been considered under the various subdivisions, but let me lay particular stress on the fact that it is woefully abused by the profession, and in our training school for nurses, ethics is an obsolete branch. See that it is resurrected, for its observance in and out of the institution will place both professions in the position they are entitled to; and public admiration and respect will be augmented a thousand fold; and petty misunderstandings with our confreres will cease to be a reality.

If we endeavor to conform to the best of our abilities, with the points outlined in this paper, our institutions will grow and prosper, and the harmonious effect of united action will produce results beyond our greatest expectations. I thank you.

PYELITIS IN CHILDHOOD

By DR. C. B. PRESTON,
Kingston, W. Va.

Read Before Fayette County Medical Society, June 8, 1920.

I am presenting this paper to open for discussion the subject of Pyelitis in children rather than a description of a disease that is the most frequent cause of obscure fever in childhood. This may attack any age, but is most often found under two years old. Statistics show about twenty percent occur below this age. The youngest I find reported is eight days old. The source of the infection is one of theory, with two possible ways; one an ascending through the Ureters from bladder; the other through the lymphatics and blood current. The colon bacillius being the organism most often encountered, but there may be any pathegenic organism demonstrated. Other than the infectious diseases renal calculae may be a predisposing cause. In the acute stages the pelvis of the kidneys is involved; in the more chronic cases the mucus membrane is thickened throughout all its layers and the inflammation often extends to the cortex of the kidney.

The clinical picture can be described in a few words: a female child acutely

ill and in considerable distress following a chill with no definite evidences of tenderness or pain anywhere and a high temperature, perhaps a hundred and five or higher and nothing to explain the fever until the urine is examined.

You note I have said a female child because this is rarely found in a male. I have seen one case in a male; this was following an attack of influenza and am reporting this case later. The fever is continuous, usually for a period of about six days. Then there is occasionally an intermission of three or four days. The rise and drop in the temperature is rapid. In a typical case there is a rigor each day followed by rapid rise of temperature lasting from four or five hours, drops very rapidly and remains low for the remainder of the day. During this time the child is bright and playful and should we happen in at this period we are liable to be too sure the child will be well in short order, and have an occasion to discuss with ourselves why we are hurriedly summoned back a few hours later.

In untreated cases this course of events may run on for months. Each attack with equal severity, in some cases there is no remission, but a continuous temperature for considerable length of time. The difficulty in collecting a specimen of urine may explain one reason why we fail to recognize the true nature of this temperature. The urine in pyelitis is acid in reaction with no foul ammonical odor. The reverse of the case in cystitis. The amount of pus varies according to the stage and area involved. The albumin is found in accordance with the amount of pus. A great deal of stress is laid on the rigor preceding the rise of temperature, this being extremely rare in other infections. A convulsion is rare but the child shows many nervous manifestations due to the effect on the central nervous system of the extremely high temperature. There is practically a complete loss of appetite during the attack.

The treatment is citrate of potash and bicarbonate of soda in large doses, continued until the urine is alkaline for five or six days, then allowing it to become acid by nature or hastening the change with sodium benzoate. I believe a quick change from an acid to alkaline reaction gives the best results. This treatment be continued until the urine is free from pus.

Case A. A girl two years had had diphtheria at one and one-half years and enlarged tonsils with repeated attacks of tonsilitis; history otherwise negative. The first suspected infection of kidney followed an attack of tonsilitis at which time there were evidences of otitis media and as a result of an examination of the ears the right drum was punctured followed by purulent discharge; two days later the typical rigor occurred and on the third day the temperature reached 106.5 by rectum and remained there for six hours except a short period of time when temperature was lowered one degree by cold packs. These attacks were repeated at intervals for a year at which time tonsils were removed and the pus immediately cleared up.

Case B. A boy three years old came under my observation in December with a history that he had not completely recovered from a severe attack of influenza in October and a question was there not a focus in lung.

The boy in the morning looked bright and did not have the usual expression of the chronic infection or a prostration you would expect to find under those conditions in this period of time. The same afternoon the temperature was 105,

lasting about four hours. The same conditions was noted on the second day of observation. Then the kidney was suspected and the urine examined. This case required one month of treatment and the pus cleared up.

SYMPTOMS AND TREATMENT OF URETHRITIS

By C. A. FARREN, M. D.,
McClung, W. Va.

This paper is not deduced from the actual experience on the subject by the writer, but the gist of which was obtained from a series of lectures given in New York the past summer. Therefore, I shall ask each one present to make himself free to criticise any statement which he feels is not practical and thoroughly in accord with his methods in treating the disease.

It will not be necessary to go into the diagnostic symptoms very extensively, except from the microscopical findings, discharge and edema around the meatus.

A few sanitary instructions should be given along with general treatment. The patient should be forbidden all violent exercise such as running, swimming, dancing, gymnastics and extreme exertion of any kind. All substances which may bring on constipation or excite the generative organs should be forbidden, such as alcohol, coffee, tea, highly spiced foods and condiments, very acid or salty dishes and the use of various shell fish. The use of tobacco in small amounts by those habituated to its use may be continued but excess is contraindicated.

The patient should be instructed to maintain scrupulous cleanliness, using a clean dressing after each micturition, after such handling, the hands should be washed thoroughly and the eyes should not be touched because of the danger of gonorrheal conjunctivitis.

The patient should drink freely of water. It may be necessary to influence the reaction of urine, making it either acid or alkaline as conditions indicate. The best known alkaliners are the well known potassium salts, the acetate, bicarbonate and citrate; any one of these salts is efficient if given in sufficient doses. The acetate is perhaps the most active alkali of the three, the bicarbonate is the most disagreeable to take and the citrate the most pleasant.

The urine is more readily rendered alkaline by the administration of the alkali directly after a meal, at which time the urine is nearest to a neutral on account of the production of hydrochloric acid in the stomach.

It should be emphasized that no patient with gonorrhea can be well treated, unless at each office visit he passes urine that has been retained for at least three hours, into two glasses, he dividing the amount as nearly equal as his judgment permits. The wash out from the urethra can thus be examined in the first glass and the urine from the bladder and posterior urethra be examined in the second glass, and the conditions thus arrived at will many times decide the treatment that is needed.

Local Treatment: This condition should be considered from a surgical standpoint. Why should this treatment differ from a wound, with a low grade infection in any other part of the body? For convenience in the treatment, we may divide an ordinary case into three stages. First stage, from third day to two weeks, with a two glass test, the first cloudy and the second clear. Place patient on table, with a small-calliber, metal or hard rubber catheter on the one end of which

a rubber bulb is placed. Give a deep instillation of a freshly prepared, 30 to 50% Sol. Argyrol; hold the contents in the urethra thirty minutes. Repeat this procedure two or three times a week. The greatest objection to the use of Argyrol is staining the clothing, but these stains can be removed immediately by the use of a 1-100 bichloride solution.

The second stage, from the second to the fourth week, the first glass with sinking shreds or clear, and the second glass clear. Give a deep instillation of silver nitrate 1-100 to 1-500 solution; hold in thirty minutes. Repeat twice or three times a week.

The third stage, from the fourth to the sixth week, the first glass with floaters, semi-floaters, or clear; second clear. Give the following injection:

℞ Zinc Sulph
Ac. carbol.
Pulv alum aa gr iv
Glycerine 3ii
Aqua Dest qs ad. ℥iv

Inject three or four times weekly; hold in ten minutes.

Two cloudy urines means a complication of which the symptoms are chill and temperature, Pyuria, Frequency, Dysuria and terminal hematuria.

Treatment: Rest in bed, external heat sitz bath, colonic irrigations, hot water bag supra-pubically Psychrophore medication.

℞ Tr. Bellad 3ii
Sod. Benzoate 3vi
Tr. Gullheria as ad. ℥vi

Sig: 3i q 4 times daily in water.

To relieve the pain at night give following:

℞ Ext. Opii gr. vi
Ext. hyoscy am gr. v
Ol Theopromine qs.
Fiat in Supp No. vi.

Insert one in rectum at night. Do not begin injections till the congestion has subsided around the meatus.

Do not give injections if two cloudy urines are present.

Necrology

ADOPTED BY BARBOUR-RANDOLPH-TUCKER COUNTY MEDICAL SOCIETY, JULY 17, 1920.

Dr. Hoddie Wilbur Daniels was born on a farm near Beverly, Randolph County, Nov. 23rd, 1871.

He was educated in the public schools and the West Virginia Wesleyan College, Buckhannon, W. Va., after which he entered the Baltimore Medical College (now University of Maryland), graduating on April 17, 1894. He first located in the state of Illinois, where he remained only a short time, returning to West Virginia, soon locating at Womelsdorf, (now Coalton), where he remained about eighteen months. He then, in Nov., 1895, located in Elkins, where he remained in active general practice until he entered the medical service of his country, volunteering in March, 1917, receiving his commission as first lieutenant June 5th and was called to service in July, and left home Aug. 2, 1917, for Officers' Medical Training Camp at Fort Oglethorpe, Ga., and after three weeks training was transferred to the regular army at Syracuse, N. Y., and was attached to the medical department of the 38th Infantry. In October they were sent to Charlotte, N. C., and remained there until March, 1918, when they were ordered to France, arriving April 7, 1918. Dr. Daniels being promoted to captain April 12, he

went into active service June 1st and participated in the Aisne-Marne defense, when the Boches were checked at Chateau-Thiery and in the great defense action of July 14 to 18, in which the 38th won much praise for bravery and endurance. While on duty caring for the wounded on July 19th, Dr. Daniels was fatally wounded by a sniper. He was highly commended by his officers for his bravery and unflinching courage under most trying circumstances. He lies buried with a soldier's honor at Ville-Chain-Blow.

Dr. Daniels married Lizzie E. Harper, eldest daughter of Randolph M. and Ida E. Harper, on Oct. 1, 1895. Four children were born: the oldest, a son, dying in infancy; the second, a daughter, Delaine Elaine, now Mrs. Wilbur Mason; the third, a daughter, Elizabeth Deloss, who is at home with her mother; the fourth, William Randolph, died four years of age. The death of his only son, living, was quite a shock to Dr. and Mrs. Daniels, and had much to do with his early decision to enter the army service at the time he volunteered.

Dr. Daniels had quite an extensive practice in and around Elkins. He kept well posted on current medical literature, and contributed some excellent papers to our society. He did some excellent emergency surgery with improvised instruments, for which he had special mention.

We are proud of his honored death in the service of his country, but we deplore his loss to the Society, the profession, and the country, and most of all to his family. To his loved ones we tender our profoundest expressions of sympathy.

J. C. IRONS,
A. P. BUTT,
O. L. PERRY,
Committee.

ADOPTED BY BARBOUR-RANDOLPH-TUCKER COUNTY MEDICAL SOCIETY, JULY 17, 1920.

Dr. Hugh W. Neel was born in Monroe county, West Virginia, March 3, 1872, and moved, with his father's family, to Staunton, Va., in 1898. He was educated at Washington & Lee University, graduating June 17, 1896. He attended the Hospital College of Medicine, Louisville, Ky., graduating June 30, 1906. He began his practice at Glady, where he remained until the lumber mills closed out their work, going from there to Cass, where he practiced until 1917 when he came to Elkins, and only remained there a short time, going thence to Lewisburg, W. Va., with a view of locating. On January 24, 1918, he was suddenly seized with a cerebral hemorrhage, and after improving he was taken to his home in Staunton, and he seemed so much improved in health, after a time, that being so anxious "to get back in harness," as he expressed it, and on the urgent request of his friends in Cass, he returned there to resume light work, hoping to soon be able for full duty. He left Staunton, Va., on Oct. 1, 1918, and Oct. 4th he suffered from a second hemorrhage, and his sister, Mrs. Fay Neel Baylor, came and took him back to Staunton, where he died on Oct. 7, 1918.

Dr. Neel was very quiet and you had to know him well to appreciate his sterling qualities. Those who knew him best loved him most and he left a host of valiant friends to mourn his loss.

He never married. The only members of his family living are two married sisters, living in Staunton, Va., Mrs. Fay Neel Baylor and Mrs. Hugh McClure.

This Society expresses its sorrow for our loss, and tenders its sincere sympathy to his sisters and friends.

J. C. IRONS,
A. P. BUTT,
O. L. PERRY,
Committee.

ADOPTED BY BARBOUR-RANDOLPH-TUCKER COUNTY MEDICAL SOCIETY, JULY 17, 1920.

Dr. George C. Rodgers was born near Monterey, Highland County, Virginia, Nov. 13, 1872. He was educated in the public schools of Virginia, attended school at Burnsville, W. Va., and at Washington & Lee University, Lexington, Va.; and received his medical training at University Medical College, Richmond, Va., graduating in 1900. Soon after graduating he began practice at Arbor Hill and Middle Brook, Va., remaining there about two years, then coming to West Virginia, he located at Alpena and Glady, where he had quite an extensive practice of near four years, coming to Elkins in July, 1907, where he formed a partnership with Dr. Daniels and was one of the main promoters and supporters of the City Hospital, gradually turning his attention to surgery, being at time of his death chief operating surgeon at the City Hospital.

Dr. Rodgers' health was very poor for some time before his last illness, and on several occasions he had to relinquish all professional work for a time. In October, 1918, he was a victim of the Spanish Influenza, which was followed by pneumonia, resulting in his death at the City Hospital, on Oct. 25, 1918.

Dr. Rodgers was married to Miss Sadie C. McCue of Virginia on April 29, 1903, and is survived by his wife, a son and a daughter.

Dr. Rodgers had a great zeal for his profession, and often greatly over-taxed his physical strength in caring for his patients. He and his wife were members of the Davis Memorial Presbyterian church in Elkins, W. Va.

This Society tenders its sympathy to the wife, children and friends, in this, their time of trial.

J. C. IRONS,
A. P. BUTT,
O. L. PERRY,
Committee.

SPECIAL TRIBUTE BY DR. A. P. BUTT

Dr. Rodgers.

I was very closely associated with Dr. Rodgers for many years. He was in control of the City Hospital and I of the Allegheny Heights.

When I was away he was called on to perform any needed surgical operations and I attempted to return the favor when he was away.

After his death I became possessed of his interests in the City Hospital.

This fact has brought home to me more than once the truth of the last words I ever heard him utter. When I bade him good-bye for the last time on the day before his death, he said "I have fought a good fight." So he had, for he was up against obstacles I believe most of us would have been unable to overcome.

The "great white plague" had for many years sealed him for its own, all his family had died of this disease and he knew full well it was but a matter of time.

It was a very common thing for him to arise from his bed, operate, stagger again

to his couch utterly exhausted. On one occasion he operated under these circumstances upon two cases for me at Davis.

As an operator he was prudent, cautious, preferring an incomplete operation and a live patient to the reverse. An adherence to this plan made his mortality rate low.

Though surgery was his specialty, it was in internal medicine that he gained most fame.

It is to Geo. C. Rodgers, more than any other man, in this part of the country and beyond, that the old, horrible starvation plan of treatment of typhoid has been very largely modified and superseded.

With those who tried to rob him of his honor during life and who will probably continue to do so after death, I leave you to judge.

I myself was a very early convert to more liberal feeding, but Rodgers was first in this section so far as I know.

I remember on one occasion he either spoke or read a paper on liberal feeding in typhoid at one of our meetings. Knowing there were some doubting Thomases he took me to his hospital. There were about one dozen typhoids in the hospital. To e ach one he said, "Tell Dr. Butt what you had for dinner today."

At an Atlantic City meeting of the A. M. A. he received what to my mind was a very great honor. This was commendation of his method of feeding by Barker.

To hear Barker advocate the feeding of typhoids as advocated by Dr. G. C. Rodgers, of Elkins, W. Va., made me proud of being a member of the B. R. T.

When I informed Dr. Babcock of his death, he exclaimed: "A man of far more than ordinary ability."

This must, I think, be the verdict of all of us who knew him intimately, who saw him as he was, who were able to grasp his fortitude, his indominable perseverance under a very mountain of difficulty.

Peace to his ashes, may his spirit move in realms where sickness and strife are unknown, may the memory of his work stimulate us to greater things.

ADOPTED BY BARBOUR-RANDOLPH-TUCKER COUNTY MEDICAL SOCIETY, JULY 17, 1920.

Dr. Charles W. Birdsall was born in Londouin county, Virginia, in August, 1852. He was educated in the public schools; learned the carpenter trade, and followed it for some years; then joined the army and served under General Custer in the West, being discharged only a short time before the massacre of Custer and his men. He then studied medicine at the College of P. & S. in Baltimore, graduating in the class of 1882. Practiced in Virginia, Maryland and West Virginia. He came from Westernport, Md., to Weaver, W. Va., May 2nd, 1917, where he remained in practice until his last illness of pneumonia from which he died in Davis Memorial Hospital at Elkins, February 11, 1919.

Dr. Birdsall was married three times, with no children by either first or second wives. He was survived by his third wife and a young daughter, who was left badly maimed by an attack of infantile paralysis.

To the wife and child and friends, the Society extends sympathy.

J. C. IRONS,
A. P. BUTT,
O. L. PERRY,
Committee.

Announcements and Communications

Dear Dr. Bloss:

It is well known to many of the readers of the Journal that there has been established here in West Virginia a branch of the American Society for the Control of Cancer.

The following physicians constitute the state committee: John E. Cannaday, Charleston; Chester R. Ogden, Clarksburg; Carter S. Fleming, Fairmont; Oswald O. Cooper, Hinton; Charles S. Hoffman, Keyser; John N. Simpson, Morgantown; Wm. W. Golden, Elkins; J. Ross Hunter, Huntington; James R. Bloss, Huntington; Wade H. St. Clair, Bluefield; J. Howard Anderson, Marytown; Rolla Camden, Parkersburg; Oliver D. Barker, Parkersburg; Mary V. McCune-Rossa, Martinsburg; Theodore K. Oats, Martinsburg; Robert J. Reed, Wheeling; Frank LeMoyne Hupp, Chairman, Wheeling.

These physicians acting as chairmen of local committees in their respective cities and surrounding counties will select workers, both lay and professional, men and women, who are interested in and prepared to encourage this vital and altruistic effort against a common foe. It is expected that all committees will organize early in October and immediately institute a vigorous campaign of education and propaganda, by all proper means and agencies at their command and in the light of local conditions.

It is expected that results will be attained by methods which have stood the test in other states, conforming of course, to the principles and policies approved by the National Council. The activities of the branch societies in other states have borne fruit, as manifested in the diminished mortality of this scourge.

The American Society for the Control of Cancer was founded in New York on May 22, 1913, at a meeting of delegates appointed by the principal medical societies of the United States, together with a number of prominent lay citizens who are convinced of the need of a national organization to disseminate knowledge concerning the symptoms, diagnosis, treatment and prevention of cancer, to investigate the conditions under which cancer is found, and to compile statistics in regard thereto.

In establishing an organization with this purpose, the founders gave practical expression to the hope and belief that a nation-wide campaign of public education regarding cancer would save thousands of lives now needlessly sacrificed every year because of ignorance of the warning signs of this insidious disease and delay in seeking competent medical help, advice and treatment even after symptoms are recognized.

It is earnestly hoped, in fact we confidently expect that every member of our State Medical Association, under leadership of that man of exceptional power and ability, Dr. J. Howard Anderson, will in every way co-operate, in teaching the public the facts as we know them and bring a message of hope on this subject of cancer. Every hospital throughout the state can be developed into a teaching center. As Dr. Bloodgood has so well said, we have much valuable information approved by the medical profession on preventive medicine, on personal and public hygiene, on the importance of county, city and state public health

departments; on the early signs and symptoms of disease. But we must not leave to the government, to national and state medical societies, and to the public press the entire responsibility of conveying this information to the general public in the proper form. Each physician and each graduate nurse must tactfully teach those with whom they come in contact.

Today, more than ever before, the individual and the family need a competent medical advisor; just as our fathers and our grandfathers had in the good old days, a trusted physician who can be a teacher as well as a healer.

Studies of considerable number of cases reported by many different investigators would indicate that on the average people afflicted with cancer wait almost twelve months after noticing some symptoms before they seek help. The educational campaign we mean to launch in this state has as its aim the annihilation of this factor of delay. The society exists to teach these and similar facts about malignant disease, and to combat the pessimism which now prevails regarding its treatment. Because the cures, as is well known, are so often concealed by the patient and family, the public cannot fairly judge of the actual success of modern methods.

Let every reader of the Journal then put his shoulders to the wheel, let our united profession lend approval and support in this real philanthrophy and thus put State Medicine in the forefront in this great fight against a hitherto unconquered enemy.

FRANK LEMOYNE HUPP,
Chairman of State Committee.

Adrian, W. Va.,
July 19th, 1920.

Editor Journal,
Huntington, W. Va.

Dear Sir:

I am sending you a few lines, giving some of my experiences which I can absolutely substantiate, which if you think worth publishing in the Journal, you have my permission to do so.

When I saw an article in the Journal A. M. A. last year on caloric diet in typhoid by a doctor in Brooklyn, N. Y., I thought some man in the profession of some ability had found out that solid food was best for these cases, and I would stay near the shore, but after reading it I felt disappointed.

Now, for the sake of humanity I will send this to you anyhow and you can do as you think best about publishing it, and will not wound my feelings if you do not, but if you do not, for the sake of a patient try it out.

I am just an ordinary M. D. and do not have the advantage of many conveniences, therefore can not get down to scientific work, but do find some things by my awkward way of doing things.

The time being near that typhoid begins I would like to submit the following experiences, which may seem to many of the profession as very unscientific and dangerous to human life. To such I will take great pleasure in proving my statements if they will come to my place when I have any typhoid cases on hand.

The experiences I refer to cover a period of fourteen years with the number of cases ranging from three to twenty-five cases per year. I have no specific

in treatment, but have a method of feeding that so far has resulted in 100 per cent recoveries.

The first four or five days I give a light diet, such as soft boiled eggs, well cooked rice, toast, etc., until after I have gotten results from my initial purge.

After this I begin giving boiled or broiled meats, potatoes, and other articles of food just the same as a well person eats except I give nothing fried or containing heavy fats, or anything that contain seeds, like berries.

My patients will eat as much and as strong diet after a week or ten days as I do and enjoy it.

I never give a bath to lower temperature. It is not necessary on a good diet. The temperature has invariably fallen to below 103 of evenings on this diet, and the patient never complains of any discomfort. My patients are free from complications. Never have a hemorrhage, and diarrhoea always is an unknown quantity after I get the solid foods taken, and delirium in all cases soon disappears.

My cases always get out of bed on the day they reach normal temperature which is the twenty-eighth day in adults, and the twenty-first day in small children, and get out of the house within three days more and can do light work in a very few days.

The loss in weight will seldom, if ever, exceed ten pounds in any case. Doctor, if you will give your typhoid cases good wholesome food and plenty of it, the undertaker will not bury any of your mistakes.

While I could go further with this article, I am trying to stick to cold facts and not give my idea as to why it is so.

If you are from Missouri, just bring your patients and let me have them the first few days, and I will show you.

Thanking you for your consideration of this statement, I am,

Yours fraternally,
EVERETT WALKER.

SOUTH AMERICAN SURGEONS

(Continued from August Issue)

XI. A DEMONSTRATION OF EFFICIENCY

The pace for many days had been a fast one. On leaving the dental clinic in Santiago, Dr. Mayo, who is always considerate of his associates, intimated that I was looking rather peaked and suggested that I return to the hotel for a little rest, as our afternoon was to be a strenuous one. This, to me, was a welcome suggestion. The officials accompanying us suggested that they utilize my incapacity to give us a demonstration of their municipal service. The city has developed a personal service organization. Any individual in distress may, in case of injury or sudden illness, call for aid from any public telephone. An immediate response is accorded in the form of an auto ambulance, with a medical attendant. We were fully two miles from the hotel. I enthusiastically consented to become the victim for the experiment. A telephone call was made, and we were asked to time the response. In less than five minutes, considerable commotion was evident in the narrow street, and with a rush an attractive, clean ambulance landed at the curb. A white-coated official conducted me to the coach and placed me upon the couch. The ambulance turned and, working continuously a three-noted siren

that could be heard for blocks and which all traffic is bound to respect, started for the hotel and arrived within the prescribed time—five minutes. It was a wild ride, because it was an official demonstration, and the importance of time on this occasion seemed to be thoroughly appreciated by the attendants. However, we reached our destination without killing or maiming any people or dogs, and without catapulting any cathedrals or corner drug-stores.

The Chileans are a progressive and efficient nation and this is obvious to the casual visitor. The Chilean Government, Army, Navy and Municipalities all reveal thorough organization, thrift, and administrative ability of the highest order. The little demonstration referred to above was a practical illustration of their attention to detail.

XII. OUR METHOD OF TRAVEL

It was difficult for us to make arrangements by which we could cover the necessary territory and return within the reasonable time limit of not to exceed two months. We, therefore, took advantage of a travel tour which was organized by the American Express Company, and the details of their plan were so generously carried out that we have not regretted traveling in that way rather than independently.

Our ship was the "Ebro" with an English crew and management. This eight thousand-ton, twin-screw steamer was built especially for cruising just before the outbreak of the war. It was thoroughly well-equipped for tropical travel, and possessed luxurious, modern conveniences.

ITINERARY

January 7, Wednesday—Sailed from New York.

January 13, Tuesday—Kingston, Jamaica.

January 16 and 17—Panama Canal.

January 22, Thursday, to January 24, Saturday—Callao, the port for Lima, capital of Peru.

January 26, Monday — Mollendo, a typical Peruvian port.

January 27, Tuesday — Arica, a Chilean port, popular as a seaside resort. An excursion by rail to Tacna, the "oasis city."

January 28, Wednesday—Iquique.

January 29, Thursday—Antofagasta, the port through which most of the products of the Chilean nitrate fields are shipped.

January 31, Saturday—Coquimbo.

February 1, Sunday, to February 14, Saturday — Two weeks on shore with visits to Valparaiso, Santiago, thence by rail over the Andes to Buenos Aires, La-Plata, and Montevideo, on the east coast.

February 14, Saturday—Returned by rail to Valparaiso.

February 29, Sunday—Through the Panama Canal.

March 2, Tuesday—Another stop at Kingston.

March 8, Monday — Arrived in New York.

XIII. OUR HOSTS OF SOUTH AMERICA

The Panama Canal has brought the western coast of South America—Lima, Valparaiso, etc.—within fourteen days of New York City, Chicago, or New Orleans. With a return to normal shipping conditions and a growing acquaintance with our South American people, a merchant marine, by mutual agreement, will soon develop that will make us the closest

neighbors. And one needs to visit these countries but once to appreciate the great worth and charm of these neighbors.

We were privileged to make our visit under exceptional circumstances. We were practically official guests; but in the busy times we had an opportunity of sitting at the home tables and getting an insight into South American family life. Everywhere we were charmed. The young men and women, the sons and daughters of our hosts, were interesting to study. In their education they are early trained in the arts, in the classics, and in the languages. The young women cultivate their music, and on a number of occasions we were thoroughly entertained by the daughters of the families playing with unusual skill the classics of Chopin, Liszt, and other composers with thorough ease and enjoyment. The young men are ambitious, and all of the young men and women have either spent a year or two in European travel, or are planning to do so. In their preparation for such travel, they have almost invariably learned English and French. And while in the past they have looked almost exclusively to Europe as their travel ground, they are now talking of America, and this spirit of friendliness and appreciation for the United States is materializing rapidly and nothing will develop their attitude more than visits by us to their countries. We must lay aside our provincial airs and cocksureness, and be willing to broaden out as they have done, learn their language as they have learned ours, and make ourselves worthy of a cosmopolitan friendship.

After visiting a few of these wonderful countries, the United States grows smaller in one's estimation, and the only way we can keep it big is to be willing to broaden out as citizens. Many representatives of the medical profession of South America will visit the United States in the next few months and years. Let us look to our laurels! Remember that they have hospitals which are equal to our best, and most of them are much more attractive. Remember that each of their principal countries has a national medical university as thoroughly equipped as are our own, with world-trained faculties, and a seven-year curriculum as compared with our four and five-year courses. Remember that the man you are entertaining has not been satisfied with the advantages afforded by his own country, but that he has also observed the best in France and in Germany. Remember that you are associating with a man from a country where a classical education is the pre-requisite of a gentleman. The United States now has the opportunity to enter into competition with the countries of the world as a medical-educational center. There is but one way to make good, and that is to utilize our great resources to the fullest extent and to do it with the realization that we are only one of the many nations which possess unusual resources. If it is possible, let us cultivate modesty, and the best way to do that, and certainly a pleasant way, is to visit the medical profession of South America.

(*The End*)

The West Virginia Medical Journal

JAS. R. BLOSS, M. D., Editor
C. R. ENSLOW, M. D.
J. E. RADER, M. D. Assistant Editors

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All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

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The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

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DELEGATES TO A. M. A. FOR 1920-1921—H. P. Linz, Wheeling. Alternate, J. E. Cannaday, Charleston.

COUNCIL

FIRST DISTRICT—H. P. Linz, Wheeling, one-year term; C. G. Morgan, Moundsville, two-year term.

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SIXTH DISTRICT—Charles O'Grady, Charleston, one-year term; R. H. Dunn, Charleston, two-year term.

THE MIGRATORY CONSUMPTIVE PROBLEM

Recently there has come to us a statistical study made of a typical resort community in Texas, to which consumptives come from various parts of the country. This study was made by the Texas Public Health Association and reported to the Southwestern Tuberculosis Conference by the Executive Secretary, Dwight E. Breed.

This report is very interesting in many respects but the particular thing which impressed me was the number of persons with tuberculosis arriving, who had been from one place to another seeking health. The actual number is not so large, as figures go, but in a small city of 16,000 inhabitants the percentage runs up to an amazing extent. Especially is this true of those who are unable to provide for themselves financially and so become burdens upon charity.

For a number of years the question of pulmonary tuberculosis has been to the fore. The rank and file of our profession is thoroughly awake to the magnitude of this problem and realizes that only the most earnest efforts will be of avail in meeting it.

Personally the opinion is held that this disease is one of the most responsive to treatment, "PROVIDED" that we make a diagnosis in the very beginning. Too often we do not appreciate the seriousness of the condition of a patient who does not seem to be ill; the ones who just "feel badly" as they put it. It is our rule to go over these persons with especial care and to employ all the diagnostic methods available before arriving at final conclusions. True it seems, at times, to have been somewhat superfluous but the occasional patient with incipient tuberculosis repays for all the time and trouble.

These are the patients whose disease is curable. Experience proves that they do respond to treatment promptly and in the environment in which they live. By this is meant not necessarily their home surroundings but the climatic environment.

The treatment of tubercular patients does entail an endless amount of painstaking care and attention to detail. Unless we are willing to give this we should make no effort to handle such cases. To treat them in a half-hearted manner for some months and then try to unload our responsibilities by sending them away from home to die, really, criminal negligence.

How often we see or know of persons far advanced who have been advised to go to New Mexico, Nevada, Colorado, Texas or some other far locality. No thought being taken apparently of their condition from the standpoint of finances or physical strength. It seems that we, as physicians, have not in the past given this matter the thought we should. Not only is it wrong to awaken a false hope in the mind of the patient who is probably unable to withstand the hardship of travel to say nothing of the lack of funds, but it is doing a very grave injustice to those communities to which they may drift.

Our state has established an institution for the treatment of citizens who have tuberculosis. The rates are very reasonable and the treatment is equal to any to be obtained in the country. The only trouble is the lack of accommodations for all who should be there for treatment.

Let us remember these things when advising our patients to go away from home in search of health.

WORK OF MENTAL HYGIENE COMMITTEE IN WEST VIRGINIA

The National Committee for Mental Hygiene, No. 50 Union Square, New York City, an influential and efficient organization backed by the Rockefeller Fund, is well under way in their survey of the mental defectives in its various phases in West Virginia, and Governor John J. Cornwell has acted wisely in appointing the State Commission known as "The West Virginia Mental Hygiene Commission." This State Commission is to act in conjunction with the National Committee in making this state survey.

Dr. V. V. Anderson, of New York City, is directing the survey from the National Committee's standpoint, and has employed a corp of psychiatrists and psychologists, who are giving their undivided attention to the work.

The State Commission selected one of the most available and efficient men in the state when they selected Dr. L. V. Guthrie, superintendent of the Huntington State Hospital, to act as chairman of the State Commission, and Dr. Guthrie has been devoting considerable time to the work and has been given several

months leave of absence from his hospital work at Huntington.

Up to the present time the State Orphanage and the Odd Fellows' Orphanage at Elkins have been examined, also the Boys' Industrial School at Grafton and the Girls' Industrial School at Salem have been examined. About the middle of August the state penitentiary at Moundsville was undertaken and the work there is still going on. The county jails and county almhouses at Clarksburg and Fairmont have been examined and this work is now being pushed in Ohio county and will proceed to various other counties throughout the balance of the Summer and Fall.

The object of these examinations being to determine the number of defectives in West Virginia, and their conditions, and also the conditions in the various institutions caring for these unfortunates. Recommendations will finally be made after the work has been completed, as to bettering the conditions of these unfortunates. Much valuable information will be gained as to the relationship of feeble-mindedness with criminals, juvenile delinquency, etc.

The public schools will be examined after the school year has commenced and special recommendations will be made for the training of those who are defective or backward. Fortunately this survey with its valuable information will be of little cost to West Virginia as the National Committee will pay the major portion of the expense incurred. A special report will probably be made to the coming session of Legislature.

THE MEDICAL PROFESSION

It is not often we read a newspaper or hear of a person knocking the doctors. Sometimes it is true some "Medical Liberty League" or some ignorant person who wishes to trifle with human life without education, knowledge or any sort of training whatever, raises a great howl because there are laws restraining them and protecting the qualified physician in his business as well as the patient his life. The modern doctor's creed seems to be: "We will make ourselves as competent as possible to heal your diseases if physical misfortune overtakes you or if you are so foolish as to make yourself sick."

For years the medical profession has been engaged in preaching the doctrine of preventive medicine which if fully successful, would extinguish itself. In doing this, much thankless toil and labor has been spent. The medical profession has not only discovered the life saving, preventive measures, but has begged and pleaded with the public to accept them. It has humiliated itself before legislatures, it has appealed to governmental authorities, it has spent its substance on the education of the people, it has labored with the individual for the sake of his own health, it has taught the mother how to save her babies from sickness and all the while taking the bread from the mouths of its own children.

As the mother is to the child, so is the medical profession to all mankind. It is slowly but inevitably, with beneficent purpose and with lofty aims, abdicating the necessity for its own existence. In teaching prevention of disease, it is pointing the way for its own obliteration. We cannot be unfair to the doctors without being unfair to ourselves.—Exchange.

State News

NEWS ITEMS FROM CHARLESTON

Dr. P. L. Gordon has returned from a visit to Camden, N. C.

Dr. G. A. MacQueen and family have returned from a trip to the east, including New York, Washington and Atlantic City.

Dr. A. L. Amick, accompanied by his mother and sister, have had a delightful automobile trip to different points in the state.

Dr. P. A. Haley and family have returned from an extensive motor trip covering many places of interest, crossing Pennsylvania to the Delaware Water Gap, then on to Lake Champlain and Canada.

A letter from Dr. W. A. McMillan states that he is on his way to London after a tour through Belgium. He does not know when he will return to the United States.

Dr. R. A. Ireland, who has been in attendance at the New York Post Graduate School, is again at his office. While in New York he took a course in Medical Diagnosis.

Dr. S. C. Austin expects to go to Ohio on a vacation shortly.

Dr. M. L. Dillon, who has been on a vacation for the past two months, is greatly improved in health and expects to return to Charleston the first of September.

Dr. John W. Moore spent the month of August in taking a motor trip through Virginia and North Carolina.

Dr. J. B. Whittington, of Virginia, has been the guest of his brother-in-law, Dr. W. S. Shepherd, on Ruffner avenue.

Dr. W. A. Thornhill has returned from Philadelphia, where he took a course in Radium Treatment. He expects to be able to offer this treatment in about three weeks. He also visited the Johns Hopkins Hospital in Baltimore and the Clinics in New York for observation of the most approved methods of Radium Therapy.

Invitations are out for the wedding of Miss Mildred Mason, of Salem, Massachusetts, to Dr. G. H. Barksdale, of Charleston. The wedding will take place on September the 8th.

Dr. M. V. Godbey was recently nominated by the Republican convention as state senator. J. E. C.

Dr. Karl C. Prichard and Mrs. Prichard, of Huntington, spent several weeks in Canada in July.

Dr. W. W. Strange, of Huntington, has gone to Hansford where he is connected with the Sheltering Arms Hospital.

Dr. E. T. Goff, of Smithville, has gone to Boston to take post-graduate work. When he returns he will practice with his brother, Dr. L. C. Goff, of Clarksburg.

Dr. Nathan Poliakoff, who has been located at Mount Hope, has removed to Charleston.

Dr. G. D. Johnson, who has been practicing at Fleming, Ky., is now located at Jenkins.

Dr. T. W. Moore and wife, of Huntington, spent sometime recently motoring through the New England states.

Dr. and Mrs. H. D. Hatfield, of Huntington, after quite an extensive tour of the west, have returned home.

Dr. and Mrs. B. L. Hume, of Huntington, have enjoyed a motor trip to points in Virginia and Maryland.

Dr. T. F. Batliss, a former resident of Huntington, but who had lived in the east for a number of years, died recently.

Dr. and Mrs. J. R. Bloss spent two weeks in August at Atlantic City and Rockville, Md.

Dr. Atwood Haning, of Wheeling, was a recent visitor at the home of Dr. H. A. Brandebury in Huntington.

Born to Dr. and Mrs. W. E. Neal, of Huntington, a son.

Dr. and Mrs. I. C. Hicks and daughter, of Huntington, spent sometime at Asbury Park, N. J., and Old Sweet Springs, Va., in August.

Dr. and Mrs. A. K. Kessler, of Huntington, enjoyed several weeks at Cedar Point, Ohio.

Dr. L. Duncan Bulkley, of New York, has announced his retirement from the active practice of dermatology and will devote his attention to consultation practice in the same and to the treatment of cancer. Dr. Clark, formerly associated with him, will take up the active work.

The Chesapeake and Ohio Surgeons' Association will hold a meeting at White Sulphur Springs, September 15, 16 and 17. The meetings were dispensed with during the war. Dr. C. R. Enslow, of Huntington, is the president of the Association.

The Southern Medical Association meeting has been compelled to change its date of meeting, owing to confliction of dates with the fall racing in Louisville, which would have made hotel accommodations doubtful for all attending physicians. The time for the meeting is announced as November 15 to 18.

The meeting of the American Academy if Ophthalmology and Oto-Laryngology will be held at Kansas City, Mo., October 14, 15 and 16.

Dr. G. L. Howard, of Maysville, Kentucky, has located in Huntington, where he is connected with the Kessler-Hatfield hospital as diagnostician and has an office also in town.

Dr. W. H. Walcott, formerly located at Bemis, W. Va., has moved to Clinchburg, Virginia.

Dr. C. N. Brown, of Elizabeth, captain in the M. C. U. S. A., has received his honorable discharge from the service.

The American Association of Obstetricians and Gynecologists will hold its annual meeting at Atlantic City, September 20 to 22.

Dr. J. E. McQuain, of Spencer, who has been in the service of the M. C. U. S. A., with the rank of captain, has been honorably discharged.

Society Proceedings

Editor The Medical Journal:

The Barbour-Randolph-Tucker County Medical Society met at Davis, in Allegheny Heights Hospital, July 17, 1920, at 8 p. m.

The following members and visitors being present: Drs. Butt, Gray, Miller, Groomes, E. F. Moore, McElrath, Lanich, N. R. Davis and Irons; visitors: Drs. C. S. Hoffman, C. R. Smith, R. R. Roth, E. W. Shaffer, W. A. Campbell, Dr. Crawford (D. D. S.) and Dr. R. W. Snarely (Phar.)

Dr. Lanich presided. Minutes of previous meeting was dispensed with,

and the report of the Necrology committee, giving the brief history of the life and work of the following deceased members, was read: Drs. Hoddie Wilbur Daniels, H. W. Neel, G. C. Rodgers and C. W. Birdsall, with a personal tribute to Dr. Rodgers from Dr. A. P. Butt. The report was received, adopted and the secretary directed to send a copy to the family of each of the deceased members, also to the State Medical Journal and record in the minutes.

Dr. E. F. Moore read a well prepared paper on "An Old Fried in New Garments," being some observations on subcutaneous use of Lobelia Inflata. The doctor has had some very gratifying results from the use of this drug in several different diseases, such as membraneous croup, angina pectoris, whooping cough, asthma, Jacksonian Epilepsy, etc.

The paper was discussed by Dr. Miller, who said he had much better results in treating asthma, in getting prompt relief, by use of Adrenalin Chloride, 5 to 8 min. doses, using P. D.'s preparation.

Dr. Roth had used Lobelia, but preferred the Adrenalin.

Dr. Groomes had used it in whooping cough, finding that it relieved the paroxysms of cough to some extent, but that the initial dose gave better results than subsequent doses.

Dr. Butt said he could always learn something from any physician. He did not think that Adrenalin was of any permanent good—only lasts, in effect, 15 to 20 minutes. As to Lobelia, Dr. Butt said it doubtless has its value, but he had not used it.

Dr. Moore said he used Lloyd's subcuboid preparation in from 30 to 90 minim doses—used till gets effect. He has found it valuable in the vomiting of pregnancy, low typhoid conditions, and very satisfactory in relieving the pains following dysentery.

Dr. C. S. Hoffman read a very interesting paper on "Intestinal Obstruction," giving the history of a number of cases, both in children and adults, which had come under his observation, and the practical lessons we may learn from a careful study of these conditions. Operations should be performed with great caution, but when the diagnosis is clear, the earlier the operation the better.

The paper was discussed by Drs. Miller, Butt and McElrath, each giving some plan of treatment which has given some good results.

Dr. Hoffman said, in closing the discussion, that always you get best results from early operations, but when in doubt place patient up high, avoid purgatives and use proctoclysis.

Dr. Hoffman promised to prepare his paper for the Journal, which we trust he will do as his rich experiences may serve as a guide for many of us less fortunate in experience and observation.

Dr. Miller read a very instructive paper on "Henoch's Purpura," citing three cases of purpura which had come under his observation and one of the Henoch type. As Dr. Miller, as well as Dr. Moore, has given me his paper, which I am sending, it will be its own commentary.

Dr. Miller being the only delegate present who had attended the State Medical Society meeting at Parkersburg, reported the meeting as very good. Good papers, good attendance, but it appeared to him the meeting lacked the push manifested the previous year at Clarksburg.

Previous to beginning the program, fourteen of the physicians—two had not yet arrived—sat down to an elegant supper at the hospital, the contribution of

Dr. Butt and his hospital staff. Those of us who are so fortunate as to go to Thomas or Davis to our annual society meets always look forward to these meetings "with fond anticipations," as Dr. Butt and Dr. Miller always makes us feel good in the inner man.

The Society approved the plan for a memorial building at the University, in grateful memory of the men who sacrificed their all in defense of the liberty of the world, and pledged its support to the same.

The Society, by a rising vote, thanked especially Dr. Hoffman for coming to us with such a message, and the visiting members for their presence, and also Dr. Butt and the ladies of the Allegheny Heights Hospital for their excellent hospitality.

The Society then adjourned to meet in October, in Elkins, unless Barbour county asked for the meeting. All went home feeling this had been one of our best and most enjoyable meetings.

Dr. R. R. Roth, of Thomas, under suspension of rules, was elected member of Society.

J. C. IRONS,
Secretary.

June 8, 1920.

West Virginia Medical Journal,
Huntington, West Virginia.

Fayette County Medical Society met in the Masonic Hall, Montgomery, W. Va., on above date, with the following members present: Drs. Hopkins, Preston, Grissenger, Hunter, Henley, Morris, VanPelt, Eltinge, Smith, Harless, Hogshead, Bruce Poilokoff, Skaggs, Laird, Summers, Hansford, W. E. Smith, G. A. Smith, Goodman, Gooch, Brugh, Mowerer, Hess, Buford, and Drs. Graves, of Roanoke, and Dr. McCarty, of Cincinnati.

Meeting was called to order by the president, Dr. Smith. The minutes of the last meeting were read by the secretary and same were approved as read.

Dr. Preston, of Kingston, read a paper on Pyelitis in Children which was enjoyed by all present.

Miss Hays, of the Coal Valley Hospital, read a paper on Nitrous Oxide Oxygen Anesthesia. Discussed by Drs. Hopkins, Laird and Grose.

Dr. Graves, of Roanoke, Va., read a paper on the Laboratory Diagnosis of Typhoid, which was discussed by Drs. Hess, Graves and Eltinge.

Dr. McCarthy read a paper on Dizziness, which was very instructive and appreciated by all present.

The committee appointed to consult with the operators in regards the increase in fees made a report, and on the motion of Dr. Grose and seconded by Dr. Smith same was received and the committee discharged, with a vote of thanks by the Society.

On adjournment the members were invited to partake of a very delightful banquet furnished by the staff of the Coal Valley Hospital, which was very much enjoyed, and a vote of thanks was extended to the physicians and staff of the hospital by the Society.

Yours very truly,
H. L. GOODMAN,
Sec'y-Treas.

MEDICINE

TREATMENT OF GOITRE WITH INJECTIONS OF PHENOL, TINCTURE OF IODINE, AND GLYCERIN

Joseph Eastman Sheehan and William H. Newcomb (*Journal American Medical Association,* January 10, 1920) studied the treatment of eighty cases of goitre

with the injection of a mixture of equal parts of phenol, tincture of iodine and glycerin. It was noted that no untoward results followed the injection of the phenol preparation into the goitre, although in four of the ten cases subsequently operated in, some difficulty was encountered in separating adhesions between the anatomical and surgical capsule, caused by a leakage of the fluid as the needle was withdrawn from the gland. It was determined that the injections were particularly efficacious in the ordinary parenchymatous goitres of young women, resulting in the cure of 76.4 per cent. of the fifty-five patients of this type treated. This preparation seems to have the effect of relieving the thyrotoxicosis, as in exophthalmic goitre, but unfortunately, the relief is only temporary. It also quiets the heart's action, improves the appetite, has a favorable effect on metabolism, stays emaciation and reduces the mental irritability. This treatment is especially advised as a preliminary in these cases when operative interference is deemed necessary. No beneficial results were noted in the cystic and colloid forms, and it is probable that harm and much respiratory discomfort may result by enlargement of the gland, if this form of treatment should be continued with any degree of persistency.

ACTUAL CONCEPTION OF ENCEPHALOPATHIC CHILDREN

Hutinel and Babonneix (*Journal de Med. et. Chir. Practiques*) having previously established that hereditary syphilis plays the predominant role in the brain pathology of infants, divide the encephalopathic lesions into two classes: 1. Inflammatory lesions; 2. Abnormalities of development, sometimes localized in the brain, sometimes generalized over the body. These anomalies may be the result of hereditary syphilis in certain cases, or the spirochetes may act directly upon the brain and cause sclerosis, gumma or arthritis; or they may act indirectly through the internal secretory glands.

The disease may cause convulsions and epilepsy, or on the other hand it may cause spasmo-paralysis which may be bilateral or unilateral. Involuntary movements, either bilateral or unilateral, are also to be observed. Occasionally the trouble may be exclusively intellectual, and the child may be afflicted with idiocy in different forms. Usually motor disturbances and intellectual disturbances are associated.

The diagnosis may be established early, for the parents soon recognize that the child is not like others.

The treatment should be specific, and consist in mercury inunctions, hectine, novarsenobenzol, syrup of the iodide of tannin. The mother should be treated during pregnancy and the child from its birth.

ANTAGONISM OF ADRENALIN AND QUININE

A. Clerc and C. Pezzi (*Presse medicale,* December 20, 1919) report experimental work showing that in some respects adrenalin and quinine are antagonistic in their pharmacological effects. Complete antagonism exists as regards the medullary centres of the vagi, which adrenalin excites and quinine paralyzes, and as regards the heart, which adrenalin stimulates and accelerates, while quinine depresses and slows. Arterial pressure is raised by adrenalin and lowered by quinine. The adrenalin raises the pressure, however, by combined cardiac and vascular actions, while quinine lowers the pressure by depressing the heart more strongly than it contracts the vessels. Whereas adrenalin is

a stimulant to the sympathetic nervous system, quinine may be considered to have a sedative action.

THE ROCKEFELLER FOUNDATION AND THE YELLOW FEVER MORTALITY

At least one reader of the West Virginia Medical Journal was present in Havana, Cuba, in 1898, when the epoch making papers of Carlos Finley and Walter Reed were read, which sounded the death knell of yellow fever. The story of that meeting of the Pan-American Medical Congress, the visit to Camp Jesse Lazear, the entertainment at the palace by Gen. Leonard Wood, will furnish a topic for discussion at some future time. That a serum has been found by the patient workers of the Rockefeller Institute for Research is of the greatest importance to the medical world.

Discoveries in connection with the origin and treatment of yellow fever, made by scientists of the Rockefeller Institute for Medical Research during 1919, indicate that "the chances are good of materially reducing the mortality of the disease," according to a partial review of the year's work of the institute made public recently by Dr. George E. Vincent, president of the Rockefeller Foundation.

Research work was conducted at Guayaquil, Ecuador, by Dr. Hideyo Noguchi, bacteriologist of the institute. He succeeded, by experiment with guinea pigs, the review says, in cultivating from the blood a minute organism which he named "Leptospira icteroides — 'slim spiral, the jaundice maker.'" By means of this organism he was able to prepare a serum for treatment of the disease.

"This has been administered in a number of cases with apparently favorable effect," Dr. Vincent's report says. "It seems more than likely that a means of identifying yellow fever has been found, and that the chances are good of materially reducing the mortality of the disease, which now ranges between 40 and 85 per cent, and, furthermore, that a vaccine can be made which apparently protects non-immunes against infection."

Citing the results accomplished in eliminating the disease from Guayaquil, which averaged 259 cases annually from 1912 to 1918, with 460 in 1918, the report adds that no cases have appeared there since June 1, 1919.

"It is too early to affirm that yellow fever has been completely eradicated from Guayaquil," the review says. "Vigilance will not be relaxed for a year at least. Nevertheless the possibilities of control have been convincingly demonstrated. Guayaquil, the chief seed-bed of yellow fever, has been free from the disease for months. The public has proclaimed its deliverance from a menace which had never been absent since 1842. General Gorgas' ambition to write 'The Last Chapter of Yellow Fever' seems no Utopian dream."

The commissions created in Central American countries to regulate control measures will be continued through this year and concerted efforts will be made, the review declares, to guard against another outbreak.

THE OWL AND BUBONIC PLAGUE

Much has been said and written about the mouse and the rat as carriers of that deadly sickness, the bubonic plague. In many parts of the country a penalty of $50 is imposed for the wilful destruction of the American Eagle, but nothing is ever said about saving the life of the

owl, with a record of killing 40 mice and half as many rats a day. Listen to this story:

The barn owl, when she has young, brings a mouse to her nest about every twelve minutes. As she is actively employed at both evening and dawn, and as both male and female hunt, forty mice a day is a low computation for the total capture.

EASY TO GET A DRINK IF YOU HAVE PRESCRIPTION

(N. Y. Tribune, July 13)

Certified pharmacists in Philadelphia are learning that there is more money to be earned in an oasis than in a drug store, and since the permissive features of the Volstead act make no provision for cocktail prescriptions there is much less work in the new game.

One of the first of the new thirst stations to be established in Philadelphia is now running full blast in the second floor of a saloon. The bartenders will all vouch for the statement that it has no connection with the denatured rum shop.

A sign, prominently displayed in the saloon, asserting that "prescriptions are filled upstairs," is only a bit of neighborly courtesy designed to help out the struggling druggist hustling to keep up with the list of prescription holders standing in line and waiting for their booze.

Several other saloons in different parts of Philadelphia have adopted this flimsy evasion in order to keep on unloading the huge stocks of booze withdrawn from government bonded warehouses. Since the supreme court upheld prohibition it hasn't been considered exactly safe to sell rum without a prescription.

Accordingly, the quack doctors whose activities have been seriously interfered with recently by Health Department raids, and whose easy profits have been decreasing in consequence, have been lined up for the purpose of issuing prescriptions.

"Regular customers" of nearly every saloon in the downtown district can get from the bartenders the name and address of a "doctor" who will hand out a prescription for any amount up to a quart for a rate as low as 25 cents—for the prescription alone. Prices on the booze range from $2 to $3 a pint.

This same booze is being obtained by the sellers from government bonded warehouses at a cost of less than $5 a gallon, including the transportation charges, but not counting whatever political tariff happens to be in effect. Of this amount $2.20 goes for the "medicinal preparations tax" charged by the government.—Philadelphia North American.

RADIUM OR ROENTGEN RAY?

Young, of Louisville, has written a helpful essay on this subject in a recent issue of the International Journal of Surgery. He claims that there are many indications for both radium and the x-ray. The one may act as an aid to the other in some instances, but the efficiency of either may be marred should their respective fields be encroached upon. Doubtless as we become more proficient in administration of these agents and learn early to recognize the diseases benefited by their use, the lines of demarcation between the fields will be more definitely drawn. It would be a great pity for these fields to be unduly minimized or maximized by faddists and enthusiasts whose vision is so distorted that good can be seen in only one of theses valuable remedial agencies.

Young's conclusions are as follows:

(1) There are definite fields of usefulness for radium and the Roentgen-ray both singly and collectively.

(2) Earlier recognition of diseases amenable to these agents and greater proficiency in their employment will result in a more comprehensive understanding of the indications, contraindications and limitations.

(3) The radio-therapeutist should be adequately trained in the diagnosis and clinical course of affections responsive to these agents as well as the technic of their application and the reactions which may be expected.

DR. OSLER AS A DETECTIVE!

A student, and lifelong friend of Sir William Osler, tells the following story to illustrate a characteristic phase of this great physician, whose posthumous book, The Old Humanities and the New Science, has recently been published:

"There was a quiet dignity about him that held a certain type of familiarity in check. One day as the class was leaving the ward a patient in a bed near the door called out, 'Good morning, Doc!' Doctor Osler made no comment then, but when the corridor was reached, and we were out of the man's hearing, he stopped and turned to the students and said, 'Beware of the men that call you Doc. They rarely pay their bills.'"

Surgery

WEBBED FINGERS

G. Beck (*Surg. Clin. Chicago*, 1919, iii, 723. The author presents a case of syndactylism in a 15-year old girl who had been operated upon as a child. The web had simply been split. As usually happens when only this is done, the resulting scars had caused great impairment of motion.

In such cases a real plastic operation should always be performed. A simple procedure is to form a tube out of a small rectangular flap cut from the dorsal surface, slip this tube through a slit at the very base of the web, and suture it into the palmar surface. A rubber catheter around which the skin can be formed, facilitates this maneuvre greatly. After a few days the catheter is removed, leaving a button-hole opening at the base of the web. The web is now split into the button-hole, the edges being secured on either side with a few sutures.

In Beck's case this could not be done because of the adhesions. Sufficient skin for a plastic operation could not be obtained from the dorsal or palmar surfaces of the hand. The hand was therefore sewed to the chest from which the skin necessary for a plastic operation was obtained by the formation of a pedunculated flap. A week later the flap was cut at its base and sutured into the denuded area. A good functional result was obtained.

Book Reviews

DISEASES OF THE CHEST
and the
PRINCIPLES OF PHYSICAL DIAGNOSIS
(Second Edition)

Diseases of the Chest and the Principles of Physical Diagnosis, by George W. Norris, M. D., Assistant Professor of Medicine in the University of Pennsylvania, and Henry R. M. Landis, M. D., Assistant Professor of Medicine in the University of Pennsylvania, with a chapter on Electrocardiograph in Heart Disease, by

Edward Krumbhaar, Ph. D. M. D., Assistant Professor of Research Medicine in the University of Pennsylvania. Second Edition, Thoroughly Revised. Octavo Volume of 844 pages with 433 illustrations. Philadelphia and London. W. B. Saunders Company, 1920. Cloth, $8.00 net.

The appearance of a second revised edition of this late work is justified by the popularity and early exhaustion of the first edition. Several important comparatively new conditions not appearing in the former edition are described and discussed from the latest point of view. Diagnosis especially in the acoustic branches is given detailed attention, the text being illuminated by many excellent illustrations. This important phase of diagnostic work seems to be getting more and more neglected as we have come to rely on Roentgen findings, electrodiagrams, etc., all of which too often lead to error when out of the hands of experts. A full chapter is devoted to a careful painstaking description of the electrodiagraph and its use as applied to cardiac arrhythmias and other diseased conditions of the heart. The work as a whole may be justly recommended as a desirable text book and guide.

GRADWOHL: "BLOOD AND URINE CHEMISTRY"

The publishers, The C. V. Mosby Company. The price of the book is $5.00. 801-809 Metropolitan Bldg., St. Louis, U. S. A.

In the second edition of this book the authors have presented in any exceptionally clear and practical manner, methods employed in the newer blood and urine chemistry. One beauty is the fact that the test which has proved of greatest value to experienced observers is given, and burdensome details of others are omitted.

To the biological chemist, or to those interested in this work, the book is of special value; but there is much in the text to interest the general practitioner.

Although the field is comparatively new, many valuable aids to the clinician are given. For, they ask, of what practical use is blood chemistry; are the data obtained therefrom more valuable than are urinary findings; can it show findings not obtained by urinalysis? Yes, they say: blood chemical analysis far surpass in value the most exact urinalysis.

Basal metabolism, and Folin's newer and improved blood chemical methods are also comprehensively discussed.

The most recent views of the relation of blood chemistry to diabetes and nephritis are given in detail.

One evidence of the case given by the authors is the extensive bibliography.

New and Nonofficial Remedies

Anesthesin-Calco—A brand of Benzocaine complying with the N. N. R. standards (see New and Nonofficial Remedies, 1920, p. 33). Calco Chemical Company, Boundbrook, N. J.

Gonococcus Vaccine (Polyvalent) (Gilliland)—A gonococcus vaccine (see New and Nonofficial Remedies, 1920, p. 2838) prepared from a number of strains of M. gonorrhoea Neisser. Marketed in packages of four syringes containing, respectively, 250, 500, 1,000 and 2,000 million killed gonococci; also in packages of four 1 Cc. ampules containing, respectively, 250, 500, 1,000 and 2,000 million killed gonococci. The Gilliland Laboratories, Ambler, Pa.

Phenacaine—Holocaine hydrochloride. The hydrochloride of phenetidyl-acetphenetidine, a basic condensation product of paraphenetidine and acetparaphenetidine. Phenacaine was first introduced as holocaine hydrochloride. It is a local anesthetic like cocaine, but having the advantage of a quicker effect and an antiseptic action. Five minims of a one per cent solution when instilled into the eye are usually sufficient to cause anesthesia in from one to ten minutes.

Phenacaine—Werner. — A brand of phenacaine complying with the N. N. R. standards. Werner Drug and Chemical Company, Cincinnati, Ohio (Journal A. M. A., March 27, 1920, p. 889).

Propaganda for Reform

Hepatola.—This was declared a fraud by the federal authorities in 1917, and the Hepatola Company was denied the use of the United States mails. It is still being sold in Canada. Hepatola is one of the many treatments claimed to remove gallstones. Analysis showed Hepatola to be the same old gallstone trick—that of giving the patient a large dose of some bland oil and following it up with a saline. The soapy concretions that are voided following this dosing are the "gallstones." Hepatola is essentially the same as "Fruitola" and "Mayr's Wonderful Stomach Remedy." (Jour. A. M. A., March 13, 1920, p. 752).

More Misbranded Drugs. — Boericke and Runyon's santonin and calomel tablets, acetanilid and quinin compound tablets, potassium iodid tablets, and morphin sulphate tablets did not contain the claimed amount of drug, and some aspirin tablets contained no aspirin. Sulferro-Sol was falsely claimed to cure pellagra, dyspepsia, indigestion, etc. Santal Pepsin Capsules was falsely claimed to be a specific for all bladder trouble, gonorrhea, gleet, inflammation of the ovaries, rheumatism, Bright's disease and a number of other conditions. (Jour. A. M. A., March 20, 1920, p. 818).

Platt's Chlorides. — The Council on Pharmacy and Chemistry reports that Platt's Chlorides is inadmissible to New and Nonoffical Remedies because its composition is uncertain and indefinite, and because the claims made for it are exaggerated and misleading. The A. M. A. Chemical Laboratory analyzed a specimen purchased in 1911 and one purchased in 1919, and reports that while both contain aluminum salt and zinc chloride, they differ considerably in composition and the latter contains a very small amount of mercuric chloride. In the past, the advertising for Platt's Chlorides has suggested more or less directly that, as chlorinated lime (bleaching power) may be made to give off chlorin gas which disinfects, so the air in a room may be disinfected by evaporating Platt's Chlorides. From the analysis of Platt's Chlorides it is evident that when the preparation is evaporated under ordinary conditions, only water vapor escapes. Whatever disinfecting or germicidal action the preparation may possess is exercised only when the solution is brought in direct contact with the substance to be disinfected. The aluminum and zinc salts present may be useful as deodorants, but they are not effective as germicides. The small amount of mercuric chlorid is hardly to be considered as materially increasing its efficiency. (Jour. A. M. A., March 27, 1920, p. 903).

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WEST VIRGINIA'S NEED OF A BETTER VITAL STATISTICS LAW

By Carl F. Raver, M. D.,
Vital Statistician,
Charleston, W. Va.

Read Before West Virginia Medical Association at Parkersburg, May, 1920.

The object of presenting this paper at this time is to call your attention, as a body, to certain existing conditions in our vital statistics laws.

No doubt many of you, as individuals, are already familiar with its shortcomings, but it is to you as a society, acting as a strong and virile unit of our body politic, that I appeal for action:—such action, to have as its ultimate aim the removal of our present patch-work laws from the statute books and the enactment thereon of a model, up-to-date vital statistics law. Such a law will enable us to take our rightful position, well to the front with our sister states, who now are enjoying the peace and prestige which come from enrollment in that seventh heaven, known to vital statisticians as the registration area.

In tracing back the laws in this state pertaining to the registration of marriages, births and deaths, to their origin, we get a bit of interesting history, showing the growth of the realization and need for such laws, in the minds of the people, as evidenced by the acts of their legislators.

There is no doubt that our first laws touching upon these subjects were adopted from the statutes then existing in the mother state, Virginia. These were codified and placed in the West Virginia code, as Chapter Sixty-three (63) under the title of "Marriages, Births and Deaths."

With the restrictions placed about and governing marriages, we have little to do and are only interested in the reporting of the same.

The law in 1866 provided that each physician and accoucheur should be registered in each county in which he wished to practice medicine. They were

also required to report to the county clerk each birth and death that came under their supervision, but no time limit was stated as to when the report should be made.

Every coroner and undertaker was required to report every death within thirty days (30) to the county clerk. A fee of five cents (.05) was allowed the clerk for each marriage, birth and death recorded and a fee of ten cents (.10) for each copy of such record furnished. The marriage reports were to be made by the minister celebrating the marriage.

County clerks were required to report annually to the state auditor on July 1st the number of births and deaths for the preceding calendar year. Nothing in the law at that time shows any purpose of having the reports of births, deaths and marriages reach the health department. In March, 1870, the law was amended to give the county clerks more time to make out their reports and the day of rendering a report to the state auditor was advanced from July 1st to September 1st.

In the year 1873, a general revision of Chapter Sixty-three (63) of the code was undertaken. Many needed improvements were added to the marriage laws. To secure improved reporting of births, deaths and marriages, the assessor was given the job of checking up the reports sent in. In fact, I believe the legislators felt that they had solved the question of securing complete reports, when they made it the duty of the assessor to secure a record from every person assessed, whether or not there had been a birth, death or marriage in his immedate family, and, if so, to compare the facts ascertained with the known list of births, deaths and marriages supplied to him by the county clerk, and if the name of the interested party did not appear on the clerk's roster, the new addition was to be reported by the assessor. For this work, the assessor was given three cents (.03) for each name secured and was instructed to turn in his report to the county clerk by August 1st.

Section Twenty-five (25) of Chapter Sixty-three (63) directs the county clerk to report the number of marriages, together with the number of licenses issued, to the state auditor on March 1st. This section clearly loses sight of the provision made in the section just preceding, which attempts to secure an accurate list of marriages through the efforts of the assessors. Let me ask, of what use are the marriage records secured by the assessor during the summer months if the records have already been turned in to the state authorities the preceding March?

That the records might be of easy access, the county clerk is to keep three separate books, to be known as the register of marriages, register of births and register of deaths. Section Twenty-eight (28) states that all laws pertaining to marital rights, and providing for the registration of births, deaths and marriages shall apply to colored persons as well as whites, but such registration shall be kept *separate and distinct.* The Attorney General has ruled that separate sets of registration books are not needed, but that separate columns, designated by appropriate titles, white and negro, serve to keep the registration separate and distinct. The state auditor was required to furnish all proper books, blanks, etc., with the exception of marriage license books. Why this exception, I have not been able to learn.

In 1882 another attempt was made to secure more accurate records. The law enacted during that year reads:

"Every physician and surgeon shall keep, in a book, a record of the death of such persons dying in this state upon whom he was attendant at the time of death and shall furnish annually a copy of such record to the assessor."

Moreover, every Justice of Peace and every coroner shall keep a record of all inquests and give the assessor a copy of such records. Up to this time, you will observe, no mention is made of a state department of health. In 1882 a state board of health was organized. Five years later, in 1887, there were enacted under the title of "Public Health" certain laws which placed the supervision of the registration of births, deaths and marriages under the state board of health and designated the secretary of said board as registrar of vital statistics.

This law, codified as Chapter One hundred and fifty (150) under the title "Public Health," failed to take into consideration that the registration of births, deaths and marriages was already provided for and that the supervision of the same was under the state auditor. I do not know which state department acted as supervisor during the next seven years. In 1904 this duplicity of authority was removed by amending various sections of Chapter Sixty-three (63) of the code, and substituting the words "board of health" in place of state auditor.

At this revision of this law, it was thought that, if a fee of twenty-five cents (.25) could be paid to those reporting births, deaths and marriages, it would be such an inducement to those, who rightfully should make these reports, that they could not refuse to perform their duty and such a provision was written into the law. This at once became a big inducement to the assessor to secure all the names possible as it raised his fee from three cents (.03) to twenty-five cents (.25) per record.

After several years, it was found that reports were being turned in better, but were still not as desired, as many of them contained little more than the name and date, and in 1913 the law was amended to read that the fee for reporting births, deaths and marriages is to be paid only if the reports are "*full and complete.*"

This gives you, briefly, a review of our present vital statistics laws.

Never, at any time, have these laws secured the results for which they were designed. There are two reasons for this: lack of interest in the subject on the part of those in authority, and whose duty it is to enforce the laws, and certain inherent difficulties in the machinery designed for the collecting of these reports.

No one doubts that the proper place for a vital statistics department is with the state department of health. In the early days, naturally, the collection of vital statistics had to be carried on by such forces as were available, and the auditor-county clerk-assessor plan seemed the best available. None of these people were interested in the subject per se. The law states, in one place, that if the assessor, for any reason, failed to make a report to the county clerk, the clerk should make a note of the fact and attach it to the report sent to the auditor.

Such a notation would, of course, close up an auditor's report, but it did not furnish the statistics.

The enforcement of proper reporting is left, at present, in the hands of the county clerk. To my certain knowledge, few county clerks have ever instituted proceedings against a single offender for failing to make proper reports. When questioned as to why he has never taken

such action, the county clerk exclaims, "Why I have to live in the same county with these physicians, undertakers, etc; they are my friends and I can't afford to prosecute them." As the recording of marriages, births and deaths is only a very small part of the county clerk's duties, and as he is paid a fee of only five cents (.05) for each such record, you can, in justice, hardly blame the clerk for this attitude.

The state department of health is not without a certain amount of blame in the premises. Up to two years ago, very little attention was given to the proper collection, classification and study of vital records.

It is true that the law of 1887 designated the secretary of the state board of health as registrar of vital statistics, at a salary of five hundred dollars ($500) per year, but further than receiving such reports as might be sent in by the county clerks, and making a biennial report to the governor, little was done.

In 1919, the legislature created a division of vital statistics as part of the state department of health, but failed to set forth its duties, or supply the board with any money for the proper conducting of such a department. The legislature is not wholly to blame for this, because no concerted effort had been put forth by the people demanding such a department. They have not been made to feel its necessity. However, the inertia is gradually being overcome. The world war demonstrated, as nothing ever did before, the great need of proper registration, especially of births. Every man called to the colors was interested in proving the year of his birth, and considerable injustice no doubt was meted out to many of our soldier boys as a result of failure to find the record of their birth.

A little study of the machinery used in this state for the collection of marriage, birth and death reports shows at once that it is poorly designed.

I believe we have a fairly accurate reporting of marriages, as it is necessary for every couple wishing to be married to secure a marriage license, and the ministers of our state report the marriages celebrated by them, quite consistently. But it is a different story when we come to births and deaths. The law allows births to be reported by physicians, accoucheurs, midwives, parents and assessors, not to say a word about the oldest resident member of the family, or the householder at whose residence it took place.

Deaths are to be reported by physicians, accoucheurs, midwives, undertakers, coroners, assessors, as well as resident members of the family. Every one making either a birth or death report is to be paid twenty-five cents (.25). Thirty days afthe birth or death is the time limit for such reports to be in the hands of the county clerk, from all persons except the assessor.

These reports, after being entered in the proper registration books, by the county clerk, are to be filed away. On the first day of February of the following year, an alphabetical list of the names on these reports is to be supplied to the assessor for his use in the field. Is this done? More than twenty-five per cent (25%) of the present assessors of this state testified that they have never received such a report from the county clerk. In some counties, I think, proper attention is paid to this detail, but I have on file in my office now, more than a hundred duplicate reports handed in by the assessor of one county. We get many duplicate reports, it is true, for when the physician, undertaker and oldest mem-

ber of the family each report a death, separately, duplicates are bound to occur, but no duplicates should appear in those presented by the assessor.

I have asked county courts if they considered it their duty to pay for each report, and they argue that the law requires a payment for each report, no matter how many times duplicated. There is one provision in the 1913 amendment which county courts might use to restrict excessive duplication, and that is the provision made that no fee shall be paid unless the report is made out *full and complete.* Just how many county courts are taking advantage of this rule, I do not know.

Our physicians are about equally divided as to whether or not they should receive this fee. Many of them never apply for it, feeling that the fee received for attending a case of childbirth or sickness covers the expense incident to making a proper report of the same to the state.

This is the view held generally throughout the United States, and, so far as I can learn, no fee is paid to physicians, or others in any state included in the registration area, for reporting births and deaths. The fee should be paid to the man who records the reports and is usually twenty-five cents for each record.

Because of the laxness of enforcement of our vital statistics laws, many physicians make no reports whatsoever. Others make a report yearly. Some, of course, do better than this. Because of this plan, many of our birth and death reports are not correct. In one county last year, three hundred and thirty-five (335) death certificates were turned in, sixty-two of these were made out by physicians with proper cause of death, the rest were turned in by the assessor and undertakers and gave no cause of death, or only a guess at it. Great variation is noticeable in the duplicate reports received. Names will vary, more frequently it is dates. If you allow several months to go by before you make out a birth certificate, and then trust to memory, is it any wonder that you make mistakes? The other day I received in a bundle of death certifiicates from one of our county clerks, duplicate certificates. A certain person had died March 27th and was buried March 28th. The certificate was made out properly in every way. On April 15th, just nineteen days afterward, the physician in the case, forgetting that he had already sent in one report, made out another and placed the date of death as March 29th, a whole day after the funeral. Some one in the office blandly remarked: "This doctor must have needed the twenty-five cents badly."

This incident illustrates clearly why there should be no delay in making out a certifiicate. Certificates of birth should be made out at the bedside, or at least accurates notes taken and the certificates made out in a day or so. To encourage this procedure, the division of vital statistics sent to each practitioner in the state, a neat little bedside memorandum book.

I know many of you are interested in the subject of securing proper name for the child. That is a thing we cannot govern. If parents refuse to name the child we must wait for it. The certificate is to be made out and turned in within thirty days, and if the baby's name cannot be ascertained, leave it off and we will endeavor, later, to secure the name. That is one of the functions of a division

of vital statistics and is an activity into which county clerks cannot be expected to enter.

Having thus discussed, in a somewhat rambling way, the present situation, what is the needed remedy? First, a new law improving the method of collecting reports, and then proper funds for the administration of this law.

We need a law which makes it a crime to bury a corpse, or remove the same from the state, without first securing a completely made out death certificate, and exchanging the same for an official burial permit. Under the provisions of a proper law, the responsibility of securing this certificate is to be placed upon the shoulders of undertakers, and those who bury people. An undertaker should, in no case, bury a corpse or remove the same without such permit. He is to fill in the personal history and then camp upon the physician's or coroner's trail until he secures the necessary medical certificate.

Each county is to be divided into as many registration districts, with a local registrar for each district, as may be needed to make it easy for undertakers to exchange certificates for proper permits. If burial permits are necessary before funerals can be held, then the prompt reporting of deaths is solved. Every sexton, or other person having charge of a cemetery, is to be made responsible for every burial therein.

Birth reports are to be made, as now, by physicians, accoucheurs and midwives. If none of these are present, then by the parent, and in every case, within ten (10) days of the occurrence. In some states, the time is limited to five days. Each local registrar is responsible for accurate reports from his district. He keeps track of births in every way possible, by newspaper reports, by neighborhood gossip or by any other method, it matters not, so long as he gets the report, and if he fails, then he is to file proceedings against the proper person, responsible for reporting.

Ten days after the end of each calendar month, the local registrar sends in, to the state department of health, the reports received, first having copied the reports into his registration book. For this work he is to receive twenty-five cents per record.

This, briefly, is the way the collection of reports is made. The local registrar is the agent of the state department of health, and it is up to that individual to "deliver the goods." This method is practicable, and is the one that is being used in the thirty-three (33) states now comprising the registration area. If it works in these states, it will work in West Virginia.

To be able to obtain such a law, we need to develop in the minds of our legislators the fact that we are the only state in the eastern part of the United States which, at this time, has unsatisfactory laws pertaining to birth and death registration. In 1917, I am told, an attempt was made to have a model vital statistics law enacted. It passed the senate and seemed to have promise of passing the house, but when it came to a vote, the measure was defeated. In 1919 the same bill was presented but with no one behind it, nothing came of it. We should not be discouraged by previous failures.

In Kansas, one of our very progressive states in health matters, those interested in securing the passage of a model registration law had to fight the measure through three legislative sessions before they secured its enactment. Now all over our state are men who are seeking to be elected to some office, from governor down. They have told of their plans for

better government. Have they said anything about public health and a better vital statistics law?

I believe not, and why? Because it has not been called to their attention. No body of citizens should be so vitally interested in this matter as the State Medical Society, and I am asking you, as a body, through the proper committee, to take action in this matter and draw up a resolution expressing our sentiments in the matter. Let us give this subject proper publicity. Request a statement from the various candidates, and especially the prospective members of the legislature, as to their attitude on this really important question. Get the subject before the people. There will, and can, be no difficulty in this matter, if we have it threshed out on its merits, and the proper body to start the ball rolling is the State Medical Society.

PROSTATIC INFECTION—TREATMENT

By E. O. SMITH, M. D.,
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Read Before the West Virginia Medical Association at Parkersburg, May, 1920.

In order that we may better comprehend just how infections reach the prostate and just how they operate, it may be well to refer to the relations and stricture of this gland.

In general it may be said that the prostate encircles the urethra just in front of the bladder, or expressed differently, the urethra passes through the prostate. Behind the rectum is separated from the prostate by a double fold of fascia, known as fascia of Denonvilleer, which in fact is the remains of an embryonic peritoneal fold. In front or below the apex of the gland rests on the posterior layer of the triangular ligament.

The gland is made up of porenchymatons and interstitial tissue or stroma. The porenchymatons portion consists of glandular structure, numerous branches or acini grouped about a duct which communicates with the prostatic or posterior urethra. The number of these ducts or tubules emptying into the urethra vary from 20 to 60. This glandular stricture is arranged in five *groups* not *lobes*. One small group is located in front of the urethra, and is known as the anterior group. There are two larger groups, commonly called lateral, another small group between the lateral and beneath floor of posterior portion of the prostatic urethra referred to as the middle group. There remains still another glandular group located behind or below the lateral groups, separated from them by a well developed fascia in which is found the ejaculatory ducts as they make their way from the seminal vesicles to the posterior urethra. This is known as the posterior group and its few ducts enter the urethra through the floor of the anterior portion of the prostatic urethra. These several glandular groups are held in place by the stroma or interstitial tissue. There is no definite capsule to the gland or groups of glands, but the outside of this structure is made up of connective tissue, and muscle fibers, extensions from which dip down between the glands forming the stroma. The gland receives its blood supply from a very free distribution of small vessels. Very well developed venous plexuses take care of the blood as it comes from the gland. The lymphatics connect with the external iliac, sacral and hypogastric lypm nodes.

Bearing in mind these relations and structure one can at once appreciate that

infections may easily find their way into the prostate gland. The 20 to 60 open mouths of the prostatic ducts that are found in the posterior urethra certainly exposes this gland to infection in every case of posterior gonorrheal urethritis. I am not certain that any prostate escapes where the posterior urethra is infected. It scarcely seems credible that such could be the case. This leads to the next statement, that 95 per cent or more of the cases of prostatitis, that we are called upon to treat are gonorrheal in origin, yet not necessarily infections as to gonorrhea.

Infection may reach the prostate through the blood stream as evidenced by primary, tuberculosis of the prostate.

Bacteria found in material expressed from the prostate include a large variety. In early gonorrheal prostatitis, the gonococci abound. Later there is a mixed variety, among them staphylococcus albus, aurens, citrus, streptococci, colon bacilli, a diphtheroid bacillus, tubercle bacilli and diplococcus, not Neisser's.

Prostatic infections are either acute or chronic. The acute infection may develop very early in the course of a gonorrheal urethritis, as early as the end of the second week. When this occurs the patient suffers the inconvenience of frequent and painful urination, sometimes terminal bleeding, has some fever and complains of a general malaise. Upon digital examination the prostate feels hot, slightly swollen, and is very tender. One may be tempted to do a little massaging while making the examination. *Do not massage.* Even a gentle massage will do infinitely more harm than good. No one would think of traumatising an acutely inflamed and infected area elsewhere in the body, so why maltreat a defenseless prostate. Even worse than massaging is an urethroscopic examination at this time. Keep hands off of and instruments out of such patients. He should be put to bed, given liquid diet, urinary sedatives, and frequent rectal irrigations, using large quantities of hot water. With a soft two way rubber irrigator, the hot water treatment can be continued for an hour at a time. It is surprising the great relief this hot water treatment gives the patient. Most of such cases are greatly improved and are able to be up and about in a week or ten days, yet I am convinced that if more of these patients could be kept in bed for at least two weeks there would be fewer cases of chronic prostatic infections.

An acute infection may rapidly go on to abscess formation as I have seen them do within a month after the beginning of the acute anterior urethritis. Now the clinical picture changes somewhat. There is the fever of sepsis. There may be a persistent diarrhoea. There is a marked increase in the leucocyte count. There is perineal and rectal discomfort with a sense of fullness. There may be retention of urine. The prostatic area feels greatly enlarged, generally baggy with soft areas on one or both sides. These parts are still very tender.

Chronic prostatic infection of gonorrheal origin develops rather slowly and the symptoms are not so pronounced. There is sometimes a slight sensation of rectal fullness or possibly a little perineal discomfort. The "morning drop" generally is present. The first urine contains some debris, as may also the terminal urine. The prostate is larger than normal and not very tender. Frequently there is considerable periprostatitis, or cellulitis. There may be a slight increased frequency of urination with little or no dysuria. Such a prostate will tolerate gentle massage, great care being taken to carefully collect and study bac-

teriologically the expressed prostatic contents. The patient may be contemplating matrimony in which instance the health and happiness of his future wife depends on him being free from infection. We, therefore, should fully appreciate the gravity of our responsibility when rendering an opinion to these men.

The treatment consists of *gentle* massage every two to five days, frequent urethral irrigations of hot solutions of permanganate of potash, one or two grains to the pint. The irrigations are helpful in that the posterior urethra is usually involved in this chronic inflammation. Vaccines when used should be of the mixed type as seldom do wo find a single type of organism present to the exclusion. If one expects to kill more than one bird at a shot he does not use a rifle but a shotgun. These chronic cases often test the staying qualities of both the physician and the patient. However, if both stick to their tasks regularly, reward will eventually come in the form of a cure, or at least a near cure. By near cure, I mean to convey the idea that all infection has been eradicated, although there may still be now and then a few small shreds and leucocytes in the first urine.

Long after the treatment has been discontinued and without apparent cause once in a while a patient develops an abscess in the prostate. The symptoms differ in no way from abscess formation early in an acute urethritis. Occasionally in such late abscesses the colon bacillus predominates.

Prostatic abscesses may be small, well within the gland, or they may push through to the surface of the prostate. There are three directions in which they may develop, toward the urethra, toward the rectum, and into the perineum. Very rarely toward the bladder or peritoneum.

It goes without saying that pus confined should be released. Some sort of outlet or drainage must be established. A very large percentage of prostatic abscesses can be drained through the urethra. Many of them rupture spontaneously into the posterior urethra. Many others by gentle pressure as in massaging the prostate can be emptied into the urethra. This is rather painful the first time but at once the patient is relieved. The next day's treatment may bring forth about as much pus as the first treatment, but after a few treatments the discharge of pus is greatly diminished, the fever has subsided and the patient is well on his way to recovery. Gentle massages should be continued for three or four weeks at intervals of two or three days. There are some cases where the massage does not cause rupture into the urethra, but can be encouraged by making an incision through the wall of the posterior urethra, using a specially assigned knife through the urethroscope. Objection has been raised against the urethral route for drainage, it being claimed that the drainage can not be complete. The best answer to this is a large number of cured patients, who have been so treated.

When the abscess is largely periprostatic, the tendency is to extend toward the rectum or the perineum. When a large fluctuating mass is felt with the examining finger in the rectum, this is best drained by placing the patient in the extreme lithotomy position, dilating the anal sphincters and incising through the rectal wall into the abscess. This gives the patient instant relief and should be followed by frequent rectal irrigations with some mild antiseptic solution. Very rapid recovery follows and never to my knowledge has there been any trouble on account of further

infection because of this communication between the rectum and the abscess cavity.

Very seldom do I find it necessary to open a prostatic abscess through the perineum, when the other two methods previously mentioned are not adaptable, perineal incisions can be made without opening the urethra. Drainage tubes should be kept in for a week or ten days. Very few prostatic abscesses that have been properly treated recur.

Just a few words in regard to tuberculosis of the prostate. A few cases of primary tuberculosis of the prostate have been reported. This condition for the most part is secondary not only to tuberculosis elsewhere in the body, but secondary to the tuberculosis in some other part of the genito urinary tract, a kidney, a seminal vesicle, or an epididymis, and nearly always on the same side of the body. Tuberculosis of the prostate differs very greatly from other prostatic infections both in symptoms and treatment.

Such a prostate is not very large but is nodular, and not smooth to the feel as is the prostate of other chronic infections. Patient may have a low grade of fever, some local discomfort, frequent urination. The diagnosis is made positive when tubercle bacilli are found in the prostatic discharge. There is not much to be done for the prostate itself in these cases. I have seen most satisfactory results follow the removal of a tuberculosis epididymus. Removal of a kidney does not seem to have the same beneficial effect. The tuberculosis prostate must not be massaged, except to obtain prostatic contents for examination.

The prognosis of the tbc. of the prostate is not very encouraging. It being secondary to tbc. elsewhere necessarily gives it an unfavorable prognosis. Primary tuberculosis of the prostate is discovered accidentally when examining removed prostatic specimens.

A few points to be emphasized:

(a) Acute and tuberculous infections of the prostate should not be massaged.

(b) Most prostatic abscesses can be drained through the urethra.

(c) A fluctuating prostatic abscess that bulges prominently into the rectum is best drained through the rectum.

(d) A few prostatic abscesses are best drained through the perineum.

THE SEROLOGY OF SYPHILIS IN RELATION TO ITS PATHOLOGY

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Read Before the West Virginia State Medical Association, at Parkersburg, W. Va., May 18, 1920.

When spirochaeta pallida are inoculated into a favorable host, before the chancre can make its appearance, it is necessary for the organisms to first sensitize the territory, which they accomplish probably by means of their toxins. Although the spirochaeta are known to pass into the blood stream from the fifth day on after the inoculation, they do not give rise to pathologic reactions until later, indicating that the entire host must first be sensitized. These states of immunity and sensitization develop together, and from their mixture, with the predominance of either, originates the extremely protean aspects of the disease.

BASIS OF THE WASSERMANN TEST

So far, there has never been any satisfactory proof of the existence of a definite syphilitic antibody, nor can we find

a satisfactory explanation of the various degrees of immunity found in infected individuals. Consequently, when we wish to determine the presence or absence of syphilis by serologic examinations, it is obvious that we cannot employ direct tests for the specific antibody, as we do for the bacillus typhosus, paratyphosus, dysentery, and numerous other organisms. When sensitization of the host is accomplished by the spirochete, locally, we have the appearance of the chancre; when it is accomplished systemically, we have the interaction of two forces, the spirocheta on the one hand, and the host on the other; provided, of course, the latter has sufficient vitality to react. As a result of the conflict, there is thrown into the body fluids a large amount of a substance normally present in very small amounts or not at all. In the presence of certain lipoidal bodies, conveniently termed antigen, this substance is capable of binding large amounts of complement; whereas normally there is little or no complement-binding power. This, in a word, seems to be all that is definitely known about the complement-binding reaction in syphilis. From practical experience, however, in spite of the non-specificity of the test, it has become of inestimable value to the clinician in aiding him to interpret clinical signs. The more one sees of the test, the more one is struck with its accuracy when properly performed; but it should never supercede a careful clinical investigation.

FINDINGS IN THE PRIMARY STAGE

During the period of from one to three weeks following the appearance of the chancre, we find a negative Wassermann reaction, for the reason that the combat between spirochete and host has not yet become sufficient to elaborate the complement-binding substance. As the interaction of the two begins, after sensitization of the host, we have the appearance first of a small amount of this substance followed by a larger and larger amount, as evidenced by the appearance first of a one-plus Wassermann, followed in quick succession by two, three, and four plus reactions. We have found a four-plus reaction by the twentieth day in the larger portion of cases. Rarely have we seen a positive reaction as early as the twelfth day, and then only in a mild degree. Therefore, during the first two weeks of the chancre, the preferable means of diagnosis is not by the serum reaction, but by direct examination of the lesion by means of a dark field illuminator; or if this be not at hand, by the less satisfactory staining methods.

Let me here state that the diagnosis of a chancre cannot be made with certainty by its appearance alone. Levaditi and Marie[2] have recently demonstrated that there are two varieties of spirocheta pallida. The first, which they have termed the dermotrope, because it produces skin lesions chiefly, causes the text-book picture of the chancre, in which there is marked induration, connective tissue formation, deep ulceration, and endo- and periarteritis, followed in the usual time of four to six weeks by the appearance of secondaries. The second, which they have termed the neurotrope, because of its affinity for nerve tissues, causes a papulo-squamous erosion, little or no induration or connective tissue formation, superficial ulceration, and intra-vascular round-cell infiltration, not endo-and periarteritis. The neurotrope is frequently not followed by the appearance of secondaries, but is followed by a positive Wassermann reaction, and makes itself known clinically in from three to ten years by the development of tabes, cere-

bro-spinal syphilis, or general paresis. This, we believe, accounts for many cases of syphilis of the central nervous system in which we can elicit no history of secondaries.

FINDINGS IN THE SECONDARY STAGE

From the fifth week of the disease, when the body defenses have had sufficient time during which to mobilize, to the sixth or eighth month, during the so-called secondary stage, the complement-binding substance is produced in large amounts, so that we may obtain practically 100% positive reactions. It is here that the test affords very reliable information in the matter of the differential diagnosis of skin rashes, for if they be syphilitic, the Wassermann will be positive. We have not found positive reactions in cases of malaria, tuberculosis, cancer, or typhoid, and as we have no yaws or leprosy here, we take a three or four plus reaction to be diagnostic of syphilis. Occasionally weakly positive reactions may occur in sera which have been withdrawn after a meal, due presumably to the increased lipoid content, but even here we have not seen a four plus in a non-syphilitic patient. However, it is much preferable to report on a perfectly clear serum, and the best time to obtain such is in the morning before the patient has eaten, or immediately before a meal. Formerly the ingestion of alcoholic drinks had also to be considered before withdrawing the blood, as it might convert a positive into a negative reaction, but now no alcoholic drinks we see.

FINDINGS IN THE TERTIARY STAGE

As the disease progresses beyond the stage of rash, it is very probable, in some instances, that the tissue defenses might be sufficiently great that the spirochetes, though not actually eradicated, would be overcome to such a degree that they for the time being offered no combat.[3] Such an interpretation would readily explain negative Wassermanns in patients known to have had untreated syphilis. Later on in life, a recurrence of a positive Wassermann would be expected if at any time the resistance were lowered, and offered the spirochetes an opportunity to regain their virulence, and to give combat.

Often it is observed that syphilis is suppressed by treatment to the point of a negative Wassermann, later to be followed by a positive. It is reasonable to suppose that as long as the Wassermann remains negative, the spirochetes, though they may not be eradicated, are rendered avirulent; whereas the return of a positive Wassermann indicates that the organisms have regained their virulence.

When a positive Wassermann has been rendered negative by treatment, and it remains so during repeated tests over a number of years, and if the spinal fluid is also negative, it seems reasonable to suppose that the patient is clinically cured.

In the presence of syphilis, then, we find negative Wassermanns in very early syphilis, in malignant syphilis where there is no response on the part of the patient, and in very ill syphilitics; in untreated syphilitics, whose individual resistance has been sufficient to suppress their disease, and in those syphilitics who have had sufficient treatment to suppress their infection either temporarily or permanently.[4]

In considering a negative Wassermann in individuals whose syphilis is years old, as well as those under active treatment, we must bear in mind some work done by Craig.[5] He has shown that in individuals whose syphilis is apparently latent, the Wassermann frequently varies from

month to month. One month it may be negative, two plus the second, and four plus the third; then in time it may again become negative. Because of this it is essential that a Wassermann be repeatedly negative before great diagnostic significance can be given it, and before supposing that a case is permanently suppressed. In patients suspected of having an old syphilis, in whom we find a negative blood Wassermann, I regard the provocative dose of arsphenamine a valuable aid, notwithstanding some unfavorable reports on the same. I have seen it convert a negative into a positive too frequently for it to be coincidence, and this is also the opinion of several urologists with whom I have talked.

It has been frequently noted that there may be a negative blood, but a positive spinal fluid in old cases; and in treated cases the spinal fluid often remains positive longer than the blood. Consequently the spinal fluid should always be examined before pronouncing a patient cured. What we mean by cured varies according to the point of view taken. There are unquestionably many cases of well treated syphilis which are clinically cured, but when microscopic examination of tissues taken from various parts of the body is made, the "cure" seems incomplete, to say the least. Considering the pathology of the disease, we can see why. The gumma is not the essential typical lesion of old or latent syphilis. The great majority of cases run their course without the formation of gummata. The essential tissue lesion of either late or latent syphilis is an irritative or inflammatory process, usually mild, characterized by a lymphocyte and plasma cell infiltration in the stroma particularly about the blood vessels and lymphatics, slight tissue proliferations, eventually fibrosis, and atrophy or degeneration of the parenchyma.[6]

The determination of a latent incipient syphilitic meningitis is made by lumbar puncture and examination of the fluid obtained, noting the pressure, appearance, cell count, globulin estimation, and the Wassermann. I have recently seen two cases of syphilis of the central nervous system, both of which were old treated ones, showing clear fluids, negative globulin tests, and normal cell counts, but strongly positive Wassermanns. However, these are exceptions, as we usually find that a positive Wassermann is accompanied by an increased cell count and globulin. It serves, though, to show the importance of doing all these tests. The most favorable moment for this examination is as close as possible to the fourth year after the infection. The largest portion of cases which are amenable to favorable treatment are found between the fourth and tenth years. So far as we can determine, no scientific proof has been advanced of the syphilitic nature of the latent meningeal inflammations which occur in syphilitics, meaning the direct determination of the meningitis by the spirochete. On the basis of recent microscopic examinations, compatible with all known facts, it seems that the spirochetes lodge primarily in the nervous centers, which they reach by means of the general circulation. The meningitis would thus represent an ordinary reaction of the serosa in the vicinity of the foci of growth of the parasite, and of the sclerotic and degenerated tissues.[7] The process might be compared with the reaction of the peritoenum in the vicinity of infected or degenerated abdominal viscera. Briefly, the meningitis revealed by spinal punc-

ture in syphilitics seems to be a witness, instead of the cause of, the parenchymatous nervous lesions with which it is associated.

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MERCUROCHROME 220: ITS PRACTICAL APPLICATION IN GENERAL PRACTICE WITH SPECIAL REFERENCE TO TREATMENT OF EMPYEMA; REPORT OF CASES

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Since the report on Mercurochrome 220 as a genito-urinary antiseptic by Young, White and Schwartz, published in the Journal of the American Medical Association, November 15, 1919, the writer has been afforded the opportunity of using it (in addition to excellent results obtained in the treatment of specific anterior and posterior urethritis) in varying types of infections. The following summary of cases, while too few in number to be conclusive, tends to show a wider practicability than claimed by the original report. The cases were treated under the usual disadvantages encountered outside of a well equipped hospital and laboratory, chiefly the lack of control over the patient and the failure of the latter in the strict abeyance of instructions.

CASES

CHANCROID: P. K., white, age 22, laborer, contracted a double infection of luetic chancre and chancroid. After four weeks of antiluetic treatment consisting of four intravenous injections of arsphenamin and intensive mercury medication given intramuscularly, the six chancroidal lesions of the penis were spreading. May 1, 1920, local treatment, consisting of approximately 6% lanolin vaselin ointment applied three times daily together with superficial phenol cauterization done thrice weekly, was begun. Immediate improvement was noted and at the end of three weeks the lesions had disappeared. Previous chemical cauterization alone had failed to give any relief.

SIMPLE EROSION OS UTERI: March 13, 1920, Mrs. J. G., white,, age 23, consulted the writer, complaining of a profuse vaginal discharge. Repeated microscopic examinations of smears prepared from the discharge failed to show any gonococci present. Vaginal examination showed an erosion of approximately the left half of the uterine cervix, probably started by an injury from the end of a douche syringe. Frequent douches prescribed by another physician over an extended period had failed to produce results. Three local treatments with a 1% Mercurochrome 220 solution at weekly intervals, together with a non-irritating cleansing douche brought

about a cessation of the condition. More frequent treatments would have been preferable.

ABSCESS VAGINAL FLOOR: Mrs. G. S., white, age 60, May 15, 1920, during the course of a prolonged attack of pyelocystitis developed signs of an acute localized inflammation in the floor of the vagina about two inches inside of the external vaginal opening. The pain rapidly became severe. Before any fluctuation could be detected soft packs soaked in 1% Mercurochrome 220 were placed in the vagina and changed every four hours. Within two days the impending abscess was aborted and the patient was suffering no inconvenience from that source. The penetrating power of the aquous solution was very noticeable in this case.

CYSTITIS ACUTE: January 6, 1920, W. S. M., age 25, white, male, student, was seen complaining of extreme pelvis distress, frequent, painful urination. Urinary examination showed each microscopic field to be filled with white blood cells mainly of the polymorphonuclear neutrophile variety. A sedative was prescribed and the following morning the bladder was flushed out through a rubber catheter with distilled water until the return was clear. One ounce of 1% Mercurochrome solution was left in the bladder and retained about 35 minutes. After 24 hours all subjective symptoms had disappeared and there were scattered cells found on microscopic examination of the urine. The condition cleared up within a few days upon administration of hexamethylamin.

CASE 2: G. G., white, female, age 28, developed acute cystitis during the course of scarlet fever accompanied by pain, tenesmus, frequent urination and pyuria. Three daily local irrigations of 1% solution Mercurochrome 220 brought freedom from symptoms and pyuria.

EMPYEMA: Miss G. G. G., white, teacher, age 28, contracted scarlet fever January 21, 1920. January 25, a severe pleurisy developed followed in very rapid succession by lobar pneumonia, acute nephritis, acute endocarditis, partial digitalis heart block, fibrinous pericarditis, pyelocystitis and right empyema. After the development of the last named the condition of the patient was far too critical to employ thoractomy as a method of relief, so on March 5, under local anesthesia, an intercostal incision about 2 inches in length was made in the right eighth interspace and drainage instituted. Nearly four pints of pus were obtained containing streptococcus and pneumococcus, both untyped. Profuse drainage persisted. March 8th, about 1-500 solution of Mercurochrome 220 was instilled into the chest and allowed to remain one hour, after which the patient was turned and drainage begun. This procedure was repeated the following day. March 10, a 1-250 solution was instilled as above. On the 11th the solution was omitted. The 12th, 14th and 15th the same strength was used. From this date until the 20th, the solution was omitted; then a 1,5000 strength was begun. After this the treatments were discontinued due to the excretion of the solution through the damaged kidneys as shown by the red stains on the cloths receiving the involuntary urination. The urinary excretion of the drug occurred first about March 17, and was as marked, roughly, with the use of the weaker solution as with the concentrated. There were no other untoward symptoms observed following the use of Mercurochrome 220 with the possible exception of an increase in the wild delirium the

patient had been suffering from for several weeks previously. However, the first rational words the sufferer had uttered were spoken on March 15, the sixth day after the use of Mercurochrome 220 was begun.

Conversely the amount of discharge rapidly decreased, becoming thinner and more serous, although the organisms could always be demonstrated microscopically. Throughout the period in which Mercurochrome 220 was employed the wound was the cleanest of its kind the writer has ever seen; improvement clinically was less rapid after its use was discontinued. The experiment, as such it must be called, was undertaken in desperation because of the seeming hopelessness of the case, appeared somewhat successful in spite of the many drawbacks and imperfections attendant upon its performance. The relative freedom from dangerous signs even after absorption by a grossly damaged physical mechanisms makes Mercurochrome 220 a safe drug and its further use in empyema cases under more exacting technic, as that of Carrell, and more hopeful conditions would be interesting. The case in question recovered from the many complications and is now regaining her former physical status rapidly. Chemically and microscopically the urine is free from pathological findings.

CONCLUSION: The low toxicity of Mercurochrome 220 renders it a valuable antiseptic aid in a variety of infections including those in cavities where drainage is not free.

PRACTICAL BIOLOGIC PROPHYLAXIS

By WALTER E. VEST, A.B.,M.D.,F.A.C.P.

Read Before West Virginia State Public Health Association, April 13, 1920.

For countless ages, as the human family struggled upward, disease was looked upon as a visitation of evil spirits, and, in fact, we are not yet entirely beyond the realm of superstition in such matters for the negro still wears about his neck his asafetida bag and clings to his rabbit's foot "to keep away the hoodoo." Indeed, it is even rumored that in the substratum of society are yet to be found Caucasians who deludedly cling to the belief that a buckeye carried in the left breeches pocket will ward off rheumatism. However, medicine has evolved until pathological processes are fairly well understood and the prevention of disease now rests upon a basis of scientific fact.

The specific prevention of disease dates back to the closing years of the eighteenth century, the first definite incident being Jenner's classic observation that milk maids who had had cowpox did not contract smallpox. So firmly did he believe in this protection that, on May 14, 1796, he took matter from the hand of a milk maid suffering from cowpox and inoculated an eight year old boy, the first instance of scientific vaccination. Six weeks later, he took matter from a smallpox pustule and tried to inoculate the same boy with smallpox but the disease did not result. Thus biologic prophylaxis was born. Except for refinement in technique to exclude the possibility of the transmission of other dis-

eases as well, no change has been made in Jenner's method of the production of smallpox immunity. By its practice a veritable scourge has been changed into a comparatively rare and mild disease; and the only reason smallpox has escaped extinction is that our public health laws have been so lax as not to require compulsory vaccination. In the present state of our knowledge, it would seem best to vaccinate at the age of six months and to repeat every seven years thereafter during the life of the individual to render immunity certain.

For nearly a century immunology was at a standstill as far as control of other acute infections diseases was concerned, but in 1885 the second great step was taken when Pasteur announced to the world that he was able to prevent rabies. After much experimentation he had learned that he could inoculate rabbits and by passing the virus through a series of these animals, could standardize the toxic principle and produce what he called a "virus fixe." By taking spinal cords of infected rabbits immediately after death, and drying and emulsifying them, he was able to attenuate the virus that when injected in small quantities into a well animal, it not only did not produce the disease, but after a number of injections of the attenuated virus, the animal was rendered immune to the active virus. This is the principle underlying the Pasteur treatment as now administered. Various biological manufacturing firms supply the anti-rabic vaccine and in at least some of the states it is given by the state health departments. The manufacturers forward to any physician the prophylactic treatment with full directions for administration. We cannot urge too strongly the prompt use of the anti-rabic vaccine following the bite of a rabic animal. Although the incubation period is at times prolonged, it is at other times less than two weeks and when once developed the disease is uniformly fatal.

The next great stride forward in immunology was the observation that Von Behring's diphtheria antitoxin was not only curative but prophylactic as well, and that an injection of the serum into those exposed to the disease would prevent its development. The immunity thus conferred is passive in type and very fleeting. The protection afforded is of very brief duration, probably not exceeding two weeks. Within very recent years the Schick test has been used to determine what persons are susceptible to diphtheria. This consists of the injection within the layers of the skin of diphtheria toxin to the amount of 1-50 of the minimum lethal dose for a standard guinea pig. Great care should be exercised not to introduce the toxin beneath the true skin, and when properly given a small wheal should show around the point of injection raised perceptibly above the surrounding skin and showing a sharp line of demarcation from it. If the person tested be nonimmune, a positive reaction will be shown within from twenty-four to forty-eight hours. This consists of an area of redness and inflammation around the point of injection with a diameter of one to two centimetres, and fairly sharply circumscribed. The redness persists for a period of a week or ten days and on disappearing shows a scaling of the skin and a resultant brownish pigmentation. Those who are susceptible to diphtheria as shown by a positive Schick may be rendered actively immune by the injection of a series of toxin-antitoxin mixtures. The mixture contains an excess of antitoxin so as to prevent symptoms from the toxin administration. Usually these

injections are given at intervals of approximately a week. The immunity thus produced is much more lasting than that conferred by an injection of antitoxin alone, the exact duration not being definitely known but probably about equal to that of anti-typhoid inoculation. Owing to the very short incubation period of diphtheria, often not exceeding two days, known contacts should be promptly immunized with antitoxin without waiting to ascertain whether they are Schick positive or not.

With the development of diphtheria antitoxin came the hope for a specific serum for each acute infectious disease. Probably the most successful from the standpoint of practical prophylaxis has been tetanus antitoxin. This disease, due to an anaerobe, is most likely to follow punctured wounds, especially those contaminated with soil or manure and those caused by explosives. However, it often complicates open wounds, particularly those of considerable extent, or of a crushing character. As part of the preliminary treatment of all such wounds should be given an immunizing dose of antitetanic serum, say 1,500 units. This furnishes a passive immunity only and one that is very fleeting. Therefore the dose should be repeated about every week until the patient is entirely well. The injection should be made near the site of the injury, preferably distal to it and intramuscularly in order that the motor nerves may be bathed as absorption is taking place.

Probably no single fact in modern preventive medicine stands out like anti-typhoid vaccination. A few years ago typhoid fever was credited with 500,000 cases annually in the United States, one-seventh of which resulted fatally. The economic cost was placed at something less than half a billion dollars each year. During the Spanish-American war, organizations totalling 120,000 men had 20,000 cases of typhoid. As a contrast, I would cite the fact that at Camp Wadsworth during the year of 1918, with a total of considerably more men handled there occurred only seven cases of typhoid and these among men who had not completed the inoculations. A neighboring camp—Sevier—had only three cases. We would not attribute this decrease to vaccination alone because meanwhile the science of sanitation has made wonderful progress, but certainly by far the greater part of the credit is due to preventive inoculation. As now practised, the method of choice is to administer the so-called "triple typhoid" containing killed cultures of Paratyphoid A and B as well as bacillus typhosus. Three injections are necessary to develop immunity and these are given from one week to ten days apart. The first dose contains approximately 500 millions of B. typhosus and half that number of each variety of B. paratyphosus. The second and third doses are double the first dose. As to the reactions following we are of the opinion that there is always a localized area of soreness at the point of injection, and nearly always some elevation of temperature. At times there is a severe constitutional reaction showing severe headache, chills, high fever, leucocytosis, nausea and vomiting. In a number of cases we have observed distinctive rose spots. While definite figures are not available, the percentage of severe reactions is unquestionably small. After considerable study of the subject, we became convinced while in the army, that constipation, or at least a full gastro-intestinal tract, is a very potent factor in the production of systemic reactions and now advise our patients to take a brisk saline purge on rising the day of

the inoculation and to eat very sparingly that day. It is probable that the best time of day for administration is in the afternoon, insuring rest at the time a reaction is most likely to occur. Exposure to heat and fatigue should be avoided following the inoculation. The site of choice is the subcutaneous tissue of the arm in the region of the deltoid insertion. Considerable discussion has arisen as to the advisability of inoculating tubercular subjects, but the experience of Dr. E. E. Clovis in the epidemic at the West Virginia State Sanatorium last summer has apparently demonstrated not only the wisdom but the safety of this procedure. The duration of the immunity is not definitely established. The army custom prior to America's entry into the World War was to vaccinate every three years. Now the practice is to repeat the inoculation annually. The lesson we want to learn is that by practicing preventive vaccination, typhoid can be made so rare as to be a medical curiosity if indeed it cannot be entirely eradicated.

When we turn to the acute respiratory infections—a class of diseases which causes a very large proportion of human deaths—biologic prophylaxis is not nearly so well established. No epidemic in the world's history has been the object of such intensive study as the recent scourge popularly called "flu." So far no definite conclusion has been drawn as to the primary cause, although Rosenow has produced experimentally in animals a disease condition very closely approaching influenza by insufflation into the nostrils of a strain of streptococci isolated from human cases. We know definitely that the pneumococcus and the streptococcus with their various types are but varieties of the same organism. In fact, Rosenow has been able to demonstrate that the pneumococcus can be transmuted into the streptococcus by running the successive cultures through different media; or, in other words, that the morphology of this group of organisms is, in part at least, a reaction, so to speak, to its pabulum and environment. When we consider in the aggregate the enormous amount of bacteriological work done on influenza and pneumonia, and the fact that in the great majority of instances some type of either the pneumococcus or the streptococcus was present, the deduction seems logical that influenza and pneumonia as well as the upper respiratory infections named anatomically which accompany these epidemics are but variations of the same general disease condition and are caused by the pneumo-streptococcus group. Many various mixtures of organisms have been used in the vaccines and no definite standard has been determined upon. Probably the so-called Rosenow vaccine has been used as much as any other. Apparently enough data has been collected for us to determine that inoculation is of very definite value, especially in modifying the disease and in the prevention of complications. Very striking results have been reported from certain industrial plants. In a certain group around Philadelphia, one of which was Hog Island, we have seen a report of 9,000 inoculations with only five infections following—such a remarkable showing that we are led to wonder how accurately their records are kept. A concern in Cleveland reports the inoculation of its 2,000 employees with approximately 1% morbidity and no deaths—another very remarkable record. A summary of Rosenow's statistics —gathered under the most scrutinizing scientific control, and probably as accurate as the present state of our knowledge permits—seems to demonstrate con-

clusively that vaccination is worth while. Of approximately 100,000 persons who received three doses, the morbidity rate per thousand was 87.9 and the mortality rate 1.43. Of approximately 350,000 unvaccinated controls, the morbidity rate per thousand was 281.8 and the mortality rate 8.55. Boiled down, these figures mean that vaccination eliminates two-thirds of the individual's risk of contracting influenza and four-fifths of his risk of dying from it. Another deduction from Rosenow's statistics is that we can eliminate two-thirds of the risk of complicating pneumonia. Sir William Leishman's figures, as observed in the British army, show approximately the same morbidity rate with an elamination of six-sevenths of the pneumonia risk and nineteen-twentieths of the death risk. We quote his exact figures:

		——Ratio per Thousand——		
	Number of Men	Incidence of Attack	Lung Comp.	Deaths
Inoculated.....	15,624	14.1	1.6	0.12
Noninoculated	43,520	47.3	13.3	2.25

There seems to be no doubt that Lister's work in South Africa has established the fact that pneumococcus pneumonia caused by types 1, 2 and 3, organisms can be definitely prevented by inoculation with this specific vaccine. As to the mixture to use in our ordinary work, probably one containing streptococcus hemolyticus and viridans, pneumococcus types 1, 2, 3 and 4, B influenza and the staphylococci should be used. The average West Virginia doctor has, of course, to depend upon a stock vaccine, and the exact dosage depends somewhat upon which he chooses. As now practiced, most men give three doses at about ten day intervals, increasing the dose each time about 50 percent of the first dose. Personally, I believe it better to give four doses at weekly intervals, increasing the size as indicated above. The duration of the immunity is a matter of doubt but probably does not exceed two months. We wonder how much the incidence of the various acute respiratory diseases in the winter months could be lessened by inoculating during the month of October and repeating in December and again in February. Pending final judgment, the case in favor of vaccines seems well enough made out that we should use them.

Another vaccine now being in considerable vogue is that for whooping cough. Some difference of opinion exists as to its value, but it seems probable that a fresh vaccine used in large doses will confer immunity in 75% of cases. A vaccine made without the addition of a preservative seems most potent. Talbot, of Boston, who has done valuable recent work on pertussis, advises using a vaccine one week old and repeating the inoculations every other day until four are given. He gives as proper dosage of a child of two years as follows: First dose one billion; second dose, one and one-half billions; third and fourth doses, each two billions.

So far no definite specific prophylaxis against tuberculosis has been developed, but much experimental work has been done. The most promising appears to be that of Shiga who prepares a vaccine by taking the ordinary virulent tubercle baccillus, rendering it avirulent by cultivating it in a medium containing trypaflavine, and using this in preparing a sensitized bacillary emulsion. He claims good experimental results. With the great development of biologic prophylaxis in recent years, is it too much to hope that ere long we will have a specific preventive of the Great White Plague?

ADDISON'S DISEASE — REPORT OF CASE

By E. F. PETERS, M. D.,
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Read Before the McDowell County Medical Society, August 11, 1920.

W. H. L., a male, single, aged 35 years, entered the hospital July 13th, 1920. His chief complaint, according to his statement, was from pain in his right testicle, gastric disturbances and general weakness.

He had not noticed the bronzed color of his hands and face, which on admission to the hospital caused considerable doubt and some discussion on the part of the nurses and orderlies, as to his nationality. The skin was of such a bronzed color that patient was at first thought to be a negro, but when questioned he stated that his father was half Choctaw Indian, and his mother a white American woman. This statement satisfied us as to the cause of the bronzed skin for the time being and our efforts were directed toward finding the cause of the orchitis.

The patient's family history was negative, so far as could be determined, he seemed to know very little of his ancestors, either immediate or remote.

He had typhoid fever twelve years ago; an accident eight years ago in which he sustained a fracture of the left leg, and thinks he had some two or three ribs fractured at the same time, past history otherwise negative.

The decline in health began April 26, 1920, when he began to ache all over and have some temperature. After spending twenty-two days in bed he felt some better, but three weeks later weakness, anorexia and "indigestion" made it necessary for him to go back to bed. There is a history of occasional night sweats, some cough at times but so far as we could determine, blood had not been expectorated. Many points of interest and importance might have been brought out in the history of this case, had it not been for the patient's mental condition of apathy, loss of memory and inability to connect with any degree of certainty events which happened even within the past few weeks, but of considerable importance is the fact that the above described mental state, together with other mental symptoms which will be mentioned later, are characteristic of this interesting but fatal malady.

The epididymo-orchitis first attracted the patient's attention about May 20th, 1920 and while the testicle was very painful and tender at times, especially so when he tried to walk, the history indicated that the symptoms generally were sub-acute in character from the beginning. Venereal infection denied.

PHYSICAL EXAMINATION: Hair coarse, very dark and thin, all over the top of the head. No grey hairs noticed. Having had no opportunity to observe this case previous to the time he entered the hospital, we could not attach any importance to color of the hair. Falta and Myers call attention to the fact that the hair gets darker as skin pigmantation progresses.

Eyes, ears and nose apparently normal, tonsils of the small submerged variety, showing evidences of previous infection. There were several bad teeth and pyorrhea alveolaris was present in a rather severe form. On further inspec-

tion of mouth and throat numerous blackish blue spot like pigmentations were noticed on the buccal mucous membrane, on the uvula, on the soft palate, and along the outer borders of the lips, where the mucous membrane comes together, the blackish blue spots formed almost a continuous line above and below, from one angle of the mouth to the other. These spots are diagnostic, and so far as I know are characteristic of the disease, though in rare cases, according to Fox and Bittorf, Addison's Disease is seen along with hemochromotosis.

The patient was poorly nourished as was evidenced by emaciation and a falling off in weight. This condition could be due in a great measure, at least, to the gastro-intestinal disturbances and the consequent lack of physiological absorption and assimilation, but the real underlying cause of the marked disturbances of metabolism amounting to cachexia in the later stages of the disease, is in the majority of cases tuberculosis.

In this case a physical examination of the lungs revealed broncho-vesicular breathing, together with fine and course moist rales, and a modified percussion note extending from the apex down to the upper border of the fourth rib. The lungs seemed otherwise normal, except a small thickened pleuretic area between the anterior and posterior auxillary lines on the right side.

This disease is known to affect individuals whose heredity and environment predispose them to tuberculous infection. Addison in the first description of this disease in 1855 stated that the autopsy always shows disease of both suprarenals, mostly tuberculous caseation.

The abdomen was scaphoid in shape, the muscles rigid and tense, the pulse small and weak. These symptoms, along with the pinched facial expression, suggests peritonitis, as first pointed out by Ebstein, these are of course terminal symptoms.

According to Munzer, the blood pressure is low in these cases. This case showed a systolic pressure of 90 m.m. and a diastolic pressure of 75 m.m. Of most importance from a diagnostic standpoint, is the peculiar bronzed pigmentation of the skin, which is first noticed upon exposed or uncovered parts of body. In this case the borders of the eyelids were almost black. The palmar surfaces of the hands were free from the pigment, except along the palmar folds which stood out as heavy dark lines, in contrast to the surrounding skin. Pigmentations were also noticed at the nipples, around the genitalia, and over the anal folds, but was not prominent along the line alba as pointed out by Falta and Myers in their recent book on the Ductless Glandular Diseases. On further inspection of the skin numerous light brown patches resembling old macular syphilides covered the entire body. These lesions the patient attributed to smallpox, a disease I neglected to mention in the history. I wish to state, however, that these lesions did not resemble the old scars of smallpox, and seemed to have no relation to the disease we are considering, further than the probable effect of gummatous neoplasms on the function of the suprarenal glands.

There was no evidence of a status lymphaticus, though there was swelling of some of the inguinal lymph nodes, lymphatism is a common condition in this disease, according to Weisel, Kahn and Hedinger.

The epididymo-orchitis present was thought to be tuberculous. During the patient's short stay in the hospital he

had no cough or expectoration, so the sputum was not examined. A tuberculin test was not considered safe in this case, and therefore was not given. Temperature ranged from 99 to 100 F. The nervous symptoms were insomnia, loss of memory, headache and vertigo. Later on he passed on to a mild state of delirium and then coma. No convulsion.

The blood was typical of this disease. In the case of Neusser, Bittorf and Munzer, lymphocytosis was always present, with the exception of evidences of a secondary anemia, marked lymphocytosis was the only change of importance noted in the blood.

The urine in this case showed nothing of importance except a trace of albumen and a high specific gravity.

Patient died July 19th, 1920, after having been in a comatose condition for several hours preceding the end. While a high percentage of these cases, probably 90%, have been proven at autopsy to be due to metastatic tuberculous infection, we must not lose sight of the fact that all the above described symptoms characteristic of Addison's Disease can be produced by metastases from malignant or infarction.

This disease runs a chronic course as tumors or gummata, and by thrombosis a rule, from three or four months to ten years, according to Falta and Myers. Remissions often occur in the chronic cases, in which the patient seems very much better or almost well for many months.

This case was treated symptomatically. Dessicated supra-renal glands was given three times a day for a short time, but did not appear at the late stage of the disease to have any effect on the symptoms or cause of the malady.

We hope the future may offer something brighter in the diagnosis and treatment of this disease. Bronnitz reports an acute case where death occurred on the fifth day. Karakascheff also has had an acute case to die on the fifth day.

What is more perplexing is that such men as Virchow and Lewin reported 561 cases of Addison's Disease in which 12% of the supra-renals were found healthy.

We hope that the many able men who are doing so much work in the domain of endocrinology and gland transplantation may be able to throw some light on this subject for the good of the future sufferers from this dreaded disease.

I am greatly indebted to Dr. Gordon L. Todd, of the Memorial Hospital Staff, of Princeton, W. Va., to whom the case was referred by Dr. E. I. Davies, of Crystal, W. Va., for the privilege of examining the case and for his able assistance in helping to arrive at a diagnosis. I am also indebted to Dr. W. W. Rixey, of the same hospital staff, whose able assistance in the clinical laboratory, enabled me to get a true blood picture in this case.

Announcements and Communications

HEALTH NEWS
Issued by the U. S. Public Health Service.

An All-American Health Conference—First Regional Conference in Washington in December.

Washington, D. C.—Special—The first of a series of regional health conferences authorized by the International Health Conference in Cannes is to be held in this

city, December 6-13. It will be devoted to a consideration of venereal diseases which, according to conservative estimates, constitute one of the world's most terrible plagues.

The conference is being organized under the joint auspices of the United States Interdeparmental Social Hygiene Board, the United States Public Health Service, the American Red Cross and the American Social Hygiene Association. Prof. William H. Welch, of Johns Hopkins, has consented to serve as president, and already assurances have been received that some of the foremost physicians and sociologists will participate. Prominent health officers and sociologists from all parts of North and South America will attend.

The conference will review past experiences and existing knowledge as to the causes, treatment and prevention of venereal diseases, and will formulate recommendations relating to a practicable three-year program for each of the North and South American countries participating. In addition it will make suggestions for putting such programs into effect.

In speaking of the proposed conference, Surgeon General Hugh S. Cumming, of the United States Public Health Service, said: "The United States is in the front rank of the countries which have organized against the Great Red Plague, and a consideration of the various measures which have proved of value in different communities will undoubtedly contribute much to further progress in the countries represented at the conference. More than any other important communicable disease, the spread of the Great Red Plague is inextricably bound up in a mass of social, economic, educational and recreational problems. The success thus far attending the campaign against the venereal diseases is due largely to the fact that this interrelation has been recognized and that the campaign has enlisted the co-operation not only of physicians and sanitarians, but of sociologists, judges, probation officers, educators, the clergy and good citizens generally."

VIENNA PHYSICIANS DESTITUTE

Vienna is today battling for its very existence. The gay crowds of well dressed people and elegant equipages which once thronged the magnificent Ring and the lovely Prater have long since vanished. The fine trees of the Winer Wald have become victims of the woodchopper.

A recent dispatch to the Musical Courier says: "Vienna is the saddest city in the world. If one is soft hearted, it is difficult to repress the tears as one wanders through its once brilliant streets. While one stops to greet a friend, three beggars or more appeal to one's charity. And such beggars, ragged and haggard, emaciated, yellow creatures that once knew joy. As one rides through the streets poor mothers with thin, paper-skinned babies look at one from the curb. Hands stretch out from everywhere."

A prominent New York banker, recently returned, says: "All that class (professional people) are left with absolutely nothing. All the time I was in Vienna I couldn't help feeling that I was living in a morgue. Beautiful streets, a beautiful opera house and the city beautifully kept—but nothing doing. It is terribly depressing."

Viennese physicians are in desperate straits. Their work must go on at all

events, in an effort to combat the increasing mortality and alleviate the many ills of an undernourished population. But they cannot feed their little children with the scanty government ration, even when supplemented with their pitifully meager incomes.

The American Relief Committee for Sufferers in Austria, 261 Madison Avenue, New York, of which Hon. Frederic Courtland Penfield, late American ambassador to Austria-Hungary, is honorary chairman, has created a special fund for the relief of destitute Viennese physicians and surgeons.

Contributions may be made to Alvin W. Krech, President, Equitable Trust Company, 37 Wall Street, New York City, Treasurer of the Committee.

THE AMERICAN SOCIETY FOR THE CONTROL OF CANCER,

25 West 45th Street,
New York City.

Statement made by Dr. Harvey R. Gaylord, one of the Directors of this Society and Director of the State Institute for the Study of Malignant Disease, Buffalo, New York:

"The people of the state of New York will want to receive a statement on the stewardship of the purchase of 2¼ grams of radium for which $225,000 was appropriated by the state, and announcement of which was made by Governor Smith a few days ago.

"I am very glad to take this opportunity both in the name of the Institute for the Study of Malignant Disease, the state and the American Society for the Control of Cancer which supported this purchase to say these words:

"The experiment in state ownership of a therapeutic agent, as exemplified in the purchase of this radium for social utility will have a far reaching effect. This is a development of state medicine to which no one can object and Governor Smith deserves the thanks of the state for what he did."

"Any citizen of the United States," said Doctor Gaylord, "may avail himself gratuitously after October 15th of treatment with the 2¼ grams valued at $225,000 recently purchased by New York state and the first gram of which was delivered by the Radio Chemical Corporation of New York last week. Preference, however, will be given to citizens of New York state.

"The first gram is now in the vaults of the Institute at Buffalo and the appliances necessary for its use in the treatment of cancer are now in course of construction. The engagement of a competent physicist to work with this radium is also announced. The radium we are using is an American product, mined in Colorado, brought 2,900 miles across the continent in the form of 125 tons of carnotite ore to the extraction plant at Orange, N. J., where it was reduced by fractional crystallization to its present state.

"The first purchase of radium by any state," the Doctor continued, "marks a step in the health activities of an American commonwealth. Up to the present we have had no therapeutic agents, so expensive that they could not be afforded by the average practitioner. In the case of radium that condition arises. The unit for efficient use costs not less than $12,000 and represents 100 milligrams. A gram is worth $120,000. The greater the quantity in an installation the more efficient it is, and the less it costs per

treatment. New York state has met this condition by purchasing an amount available for all its citizens.

"The value of radium has already arrived at a stage where states, and if necessary the government, should make radium available for cancer treatment, gratuitously and beyond the realm of financial limitations. The advent of radium as a therapeutic measure is the most important forward step in the treatment of cancer.

"It is not surprising that when radium first made its appearance over-optimistic claims for its use and hope of its utility should have occurred. But that time is now past. Radium has been made available in smaller and larger amounts to all of the important centers of cancer research in this country, with the result that not alone has new knowledge of this agent been greatly advanced but the technique of its use as well as its limitations have been more definitely defined. The last six years have marked steady progress in its application, and means of more scientifically and more efficaciously employing it have been developed.

"The State Institute as a result of carefully controlled scientific experiment in its hospital felt that the time had come when the state of New York should logically provide an adequate amount of radium for the Institute on the basis that its value is so definitely demonstrated that it should be made available without cost to the citizens of the state and that the opportunities of research should now be extended along practical lines. The State Institute has had since 1914 an amount of radium sufficient for scientific study. Private philanthropy has given the Memorial Hospital in New York City a large amount of radium for scientific investigation and practical application for the past four years. The Cancer Research Commission of Harvard University has also had an adequate working supply. The advances made in these and other quarters has steadily strengthened the confidence in the use of this agent and all of these centers are now seeking means to increase their supply.

"The state of New York which in 1898 took the lead by founding the first modern state cancer research institute in this country should properly be made the first state to appropriate the necessary funds for the purchase of a sufficient amount of radium for the use its citizens having available for this purpose a center of cancer knowledge and fully equipped scientific research laboratories where its use can be made immediately effective, and from which scientific progress can be confidently anticipated.

"The usefulness of raduim in the treatment of neoplasms is still in its infancy, but there are already certain kinds of cancer in which its use offers advantages and the results obtained are an improvement upon any means we have heretofore possessed. It must, however, be remembered that our main reliance in the treatment of cancer is surgery but radium in combination with surgery, frequently greatly improves the prospective cure.

"The scientific development of the last two years in the use of radium, largely through the work of Professor William Duane of Harvard University, made available a means of using radium which has immensely strengthened its usefulness. This method is the use of the emanation of radium in place of the application of radium itself. This method is only available when you have at least one gram.

"Cancer today is one of the most important diseases in the United States. It

increases 25 percent every ten years. In the United States 90,000 deaths occur yearly from it, being of equal importance to tuberculosis. In New York state about 8,000 deaths occur yearly.

"The purchase of the radium has other significance than merely its use for the treatment of cancer. It gives an opportunity for research and its use under scientific conditions is sure to increase our knowledge of cancer. While surgery still remains our main reliance in the fight against cancer we can only hope greatly to improve the results of surgery by bringing the patient to surgical treatment at the earliest possible moment. This can only be accomplished by the diffusion of knowledge among the laity of the first beginnings of cancer. It is with such work as this, that the Society for the Control of Cancer has particularly charged itself. It is felt by the Society that the advent of an alternative will overcome the reluctance of many cases to present themselves to their physicians. The Society represents 900 physicians and laymen and looks with great interest at the purchase and congratulates New York upon the step it has taken.

"The purchase of this radium by an American commonwealth from an American company which has mined its ore in the state of Colorado, will bring still further to the fore the pre-eminence of America in the treatment of cancer. Buffalo will become a radium center. While Europe, through Madam Curie, first made the precious element known to the world, the United States has developed both the ore, its extraction and its use as a therapeutic agent. It is today in the forefront of treatment of cancer. This purchase may have a tremendous effect upon further progress in this direction."

GREAT EXPECTATIONS

Why is it that so many brilliant men are nipped off in the very beginning of their careers by paralysis or some other disease of obscure origin? Probably no one but the man himself or the old family physician would be able to answer such a question.

Could we know the secret history of many of these gifted men who shone for a time as stars of the first magnitude, but like the comet, enjoyed only a brief appearance, we would find the cause of their setting lies in some of the mistakes of youth.

For generations, the youth of our land has been fed up on hero stories, which is a very proper procedure, and has been the basis of much valuable instruction. Examples of wholesome men who have lived clean lives keeping their bodies strong and healthful and conserving their energies may inspire the youth to noble deeds, but more impressive lessons might be taught by frankly instilling into the young mind the real reason why men who wasted their energy in their youth by riotous living, often including strong drink and lewd women, seem to achieve great success for a few years, but before long the effect of dissipation told on their systems and they were unable to continue.

The world war taught us much concerning our causes of disability. Are younger generations to profit by it?

Dr. F. F. Farnworth,
P. A. Surgeon, U. S. Public Health Service,
Charleston, W. Va.

The West Virginia Medical Journal

JAS. R. BLOSS, M. D., Editor
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All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

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AN APPEAL FOR THE EARLIER RECOGNITION OF CANCER OF THE UTERUS

For many years the Journal of the West Virginia Medical Association has lent its voice and influence in the fight against cancer. Certainly no apology need be made for keeping before our membership modern methods of control of a disease which claims 100,000 priceless victims annually in this land. Of the 75,000 from cancer reported in the United States, in 1913, about 30,000 were deaths from cancer of the stomach and liver, 12,000 from cancer of the uterus and other organs of generation, 7,500 from cancer of the breast, and about 25,500 from cancer of the other organs and parts.

From the very inception of its effort to organize the campaign of education in this country, the American Society for the Control of Cancer, has endeavored to secure and depend on the heartiest support and co-operation of the American profession.

The alarming increase in the number of deaths from uterine cancer suggests the imperative need of a personal ap-

peal to the practitioners of this commonwealth, for an earlier recognition of the signs and symptoms of this insiduous form of carcinoma.

In a recent issue of the American Journal of the Medical Sciences, there appeared an excellent review of this vital problem. The paper under consideration was one from the pen of Dr. Frank Worthington Lynch, of the University of California, and which appeared in the California State Journal of Medicine (1920, xviii, 47).

Dr. Lynch speaks of the increasing number of cases of uterine cancer presenting themselves to the Woman's Clinic of their institution, and he feels sure that no one could study the data offered by this mass of material without concluding very definitely that the general profession is doing little to improve the cancer situation, and that this disease in the hands of men doing surgery is quite as hopeless as it was years ago when MacMonagle reported his series of 481 hysterectomies for uterine cancer with only two ultimate cures, and when Baldy confessed that he had never cured a case by any form of treatment. Lynch states that there is no doubt but that we may not attain a proper solution of the cancer problem until the laity is educated to appreciate the importance of the earliest symptoms. Yet such education will avail but little a patient who falls into the hands of one who has not yet recognized the essentials of proper treatment and Lynch believes that we will make greater headway in our problem by devoting our chief effort at present to the physician rather than to the layman, since the physician has long been led afield by a mass of conflicting literature. A large part of the confusion in the literature has developed because the earlier student of cancer grouped in his investigations cancers from all parts of the body, ignorant of the fact that cancers differ markedly among themselves. In the same manner our gynecologic literature teems with contradictory statements because so many have grouped together in their study all cancers of the uterus, which differ so markedly among themselves in their habits of growth. Cancer of the cervix constitutes the problem of uterine cancer because so few are cured. In comparison with cervical cancers, carcinomata of the body lose their importance since they usually permit of cure. Leucorrhea and hemorrhage are the only symptoms of operable cervical cancer. Yet we are constantly disappointed in finding that many cases are frankly inoperable even though they present themselves for treatment shortly after the first sign of bleeding. There is, however, a clear reason for this fact. Only about one-tenth of the cervical cancers are everting in type, and thus capable of giving early symptoms from bruising of the growth. In the other nine-tenths, the growth early inverts or infiltrates and thus has but little chance to bleed until it has extended sufficiently far out to permit of slough of the older areas which have been deprived of the necessary circulation. Moreover, with the advent of the first hemorrhage, the case is complicated by the presence of an infected ulcer so that we can clearly see that if we await the development of bleeding that we may not hope to cure in the mass of cervical cancers. Hope lies only in the recognition of leucorrhea as the only safe early sign, and prophylactically, in the early repair of cervical lacerations and the proper treatment of gynecologic disease, since cancer is practically unknown in women who have not born children or who have not had some pelvic disorder. Out of the myriads of

cancer articles has just come the now accepted truth that we are justified in surgical measures only when they are most extensive, and that all operations should be restricted to early cases. The large remainder of cases are better treated by radium. Experience is teaching us daily that if there is question as to operability, the case does not permit of cure by surgery. Experience with radium convinces Lynch that early growths are best treated by extended removal, and all others by radium, which has no equal as a palliative measure. Whether radium cures or not may be an open question, but nothing treats so successfully a case which does not permit of an extensive operation.

F. LEM. H.

CARELESSNESS

There is not such a very great difference in the ability of "good" men in our profession. By this is meant those of us who try to give the best that is in us to those who may come under our care, or to us for advice. We are all graduates of schools which have turned out men among the very best that have ever been produced in any country. These men (the ones we call good among ourselves) are those who do read and study and keep up with the latest accomplishments in our profession in the way of unraveling the mysteries of disease.

When we of this generation hear those of the one which preceded ours tell of their experiences we wonder how in the world they got along as well as they did and why it was that they were able to cure disease at all. The great advances made in the diagnosis of various illnesses and the wonderful laboratory achievements of our day have become so common-place that we cannot understand how we could practice at all without them.

Still we find today members of our profession who do not take the least advantage of all of these things. How very few there are who are using those laboratory facilities at hand in trying to make definite diagnosis or to aid them in the treatment of the cases entrusted to their care.

Let us take as an example Syphilis. Surely there is no one who would undertake the treatment of a patient with this malady without having an examination of the blood made by a competent pathologist. The diagnosis having been made how many men take the care to treat this patient as carefully as they themselves would wish to be treated and then have the result checked up by tests to see that we have cured the patient. Just think what may be a sequel five, ten, twenty years from now. Is this because we do not know or is it CARELESSNESS?

This is but one isolated instance of the neglect of those things which are within our reach and it has seemed an opportune time to speak of this matter.

There is no man practicing medicine in West Virginia today who is not in position to have all of these aids in the doing of better work in his daily practice. In our own Journal are the advertisements of a number of privately operated laboratories and that of our State Department of Health. To any of these we may turn for the very best in the way of scientific assistance. We can no longer plead a lack of facilities.

THERE IS NO EXCUSE FOR CARELESSNESS OR GUESSWORK.

VITAL STATISTICS

For a number of years there has been quite a great deal of agitation for the revision of the statutes of West Virginia in the line of a more rigid law for Vital Statistics.

In this issue appears the paper read before the State Association at the last meeting in Parkersburg by Dr. Raver. I would insist that each of our members read his paper and give heed to his request that we make an especial effort to see and talk to the candidates for the legislature on both tickets, concerning the very great necessity for West Virginia to align herself with the other states in this important matter.

It will be an easy thing for us to see these gentlemen and talk to them at this time. If we wait until they are at the meeting of the legislature and then try to show the need of this change in the existing law concerning the regulations of the health code, we will find that they are very hard to approach and will be "pushed for time" because of matters which on the spur of the moment seem to be of vastly greater importance.

What can be of as great importance as the laws governing the health department? We work, as a profession, to care for the physical well-being of our fellow citizens, yet we get but little credit for so doing. When the legislature is in session the attitude is "I wonder what axe you are trying to grind?"

So let us get to work now, after reading Dr. Raver's advice on the question, and see if our state will not redeem herself next February.

THE BENT TWIG

"As the twig is bent, so the tree inclines." This applies not only to the plant, but to human twigs as well. The entire course of after life depends, to a large extent, upon the training received and the ideals engendered during the early years.

This does not mean that the later years are to be neglected, but it does mean that a boy or girl who has been rightly trained up to twelve or fifteen years of age will seldom go astray. The training of a child should commence the moment it is born in habits of regularity by being fed and bathed at regular periods. As the child grows older, if you wish it to believe all you say and have confidence in you, never tell it a falsehood or even try to evade the truth.

Before a child enters school at the age of six it should know where babies come from and the dangers of self abuse, otherwise its new associates will probably instruct it in the various vices. Teach your boys and girls the meaning of nature's phenomena in the various body developments, and when they ask you questions about sex relations, do not instill vulgar ideas by saying, "Shame, you must not talk about such thing."

Study your child to see its inclinations. Do not try to force it to your way of thinking, but teach it fundamental facts and leave it to reason out conclusions for itself; its school days will then be a voyage of pleasant exploration, and adult life will be a parental blessing.

F. F. F.

THE AMERICAN MEDICAL DIRECTORY: COOPERATION DESIRED

In 1905, after careful consideration, the Board of Trustees recommended, and the House of Delegates of the American Medical Association approved, the publication of a medical directory, in the belief that such publication would be in the interest of the medical profession. Since that time six editions of the Direc-

tory have been issued, and though this has been done at a financial loss the undertaking has been generally regarded with satisfaction as one of the altruistic enterprises of the Association. At present time the Seventh Edition is in course of compilation, but under most extreme difficulties. While the price of paper has doubled since the last edition was published, and the labor wage has more than doubled in the last five years, thus enormously increasing the expense, the difficulties to which we refer are not financial. To obtain and classify the data requires a large number of skilled clerical workers. And right here is our difficulty: skilled clerical workers are almost unobtainable at any price, and, in fact, it is impossible to get sufficient ordinary clerical help. This difficulty can be overcome, in part at least, if physicians who receive circulars from our Directory department will promptly respond to the request for data concerning themselves. In most instances this means simply filling out the blanks clearly and returning them. Further aid will be rendered if physicians who have moved during the last two years, or whose names are not correctly listed in the Directory will send corrections at once. We make no apology for this appeal for cooperation because the Directory belongs to the members of the medical profession; it is their Directory. If they co-operate in the manner requested, the difficulties under which the new edition is being issued will be largely removed.—Jour. A. M. A.

DR. JEPSON RETIRES

The first of October Dr. S. L. Jepson will retire as State Commissioner of Health, which position he has filled since the establishment of this department during the governorship of Dr. Henry D. Hatfield.

We have great cause to feel very grateful to Dr. Jepson for the accomplishments of his department. He has had to build up the structure of the Department of Health from the very ground, so to speak, and though he has not been able to bring to a consummation all of his plans and hopes he builded well.

After many years as an active member of our profession, it has been a fitting climax to have been our state's first Commissioner of Health.

May many happy years yet be granted to our friend, Dr. Jepson.

Dr. Jepson will be succeeded by Dr. R. T. Davis, a well known physician of Charleston.

State News

CHARLESTON

Dr. M. L. Dillon and daughter returned the latter part of August from a two months stay at Round Hill, Va.

Dr. and Mrs. E. H. Ball have returned from a visit to Baltimore.

Dr. and Mrs. J. E. Cannaday have returned from Baltimore, where they attended the convention of B. & O. surgeons.

Drs. G. C. Schoolfield and H. H. Young attended the state fair at Columbus, Ohio.

Dr. J. H. McCulloch, who was laid up on account of sickness for two weeks, has resumed his practice.

Dr. and Mrs. L. C. Covington have returned from a trip to Baltimore and New York. Dr. Covington expects to enter the medical department of the U. S. army soon. He has been tendered a commission with the rank of major.

Dr. and Mrs. John W. Moore have returned from a visit to Lexington, Virginia.

Dr. A. C. Vandine attended the state convention of the Improved Order of Red Men at Des Moines, Iowa. He also visited the Mayo Clinic.

Dr. H. H. Staats, superintendent of the Roane County Hospital at Spencer, W. Va., spent several days in Charleston lately.

Dr. G. C. Robertson, after five years continuous work, has decided to take a month's vacation. He expects to visit the Adirondack mountains. During his absence, Dr. S. M. Bull, of the Roane County Hospital at Spencer, will attend to his practice.

Dr. R. A. Ireland has returned, after a visit to his former home in Ritchie county. He also paid a business visit to Parkersburg.

A farewell party was given Sept. 21st, at the Hotel Kanawha, by the Kanawha Medical Society for Dr. L. C. Covington, who is returning to the army service.

Dr. W. P. Black was recently called to his home in Greenbrier, because of the illness of his father.

During the temporary absence of his family, Dr. M. O. Hess, of Longacre, was found dead in his home, with two bullet wounds in his chest. There are some reasons for thinking that he may have been a victim of foul play.

At Salem, Mass., Sept. 8th, Dr. Geo. H. Barksdale was married to Miss Mildred Mason. After their honeymoon spent in the White mountains and Canada, they will be at home in Charleston about Nov. 1st.

Miss Mildred Cohen and Dr. Nathan Poliakoff were married August 17th. Dr. Poliakoff has recently located in Charleston. His office is in the Day & Night Bank building.

Dr. K. C. Thomas, formerly of Welch, has located at Ravenswood, W. Va.

Dr. E. T. Goff, formerly located at Smithville, has moved to Manayka.

Governor Cornwell has announced the appointment of Dr. B. F. Shuttleworth, of Clarksburg, as a member of the public health council of the state to succeed Dr. H. E. Sloan of the same city, who has resigned.

The following officers were elected at the meeting of the West Virginia Hospital Association held at Parkersburg: President, Dr. G. A. MacQueen, Charleston; first vice president, Dr. R. J. Wilkinson, Huntington; second vice president, Dr. W. H. St. Clair, Bluefield; secretary-treasurer, Dr. J. E. Wilson, Clarksburg; legislative committee — Dr. W. W. Golden, Elkins; Dr. A. K. Kessler, Huntington; Dr. Wade H. St. Clair, Bluefield; publicity committee—Drs. W. W. Golden, Elkins; J. Ross Hunter, Huntington; J. W. Moore, Charleston.

Dr. T. E. Vass, of Bluefield, who has been associated with the St. Luke's Hospital of that city, has opened offices.

Dr. C. H. Scott and family, of Bluefield, who have been on a vacation motoring to Atlantic City, have returned home.

Dr. and Mrs. W. C. Slusher, of Bluefield, are the happy parents of a new girl.

Dr. J. B. Kirk, of Bluefield, has been made chairman of the Democratic party of Mercer county.

Dr. S. L. Jepson, of Charleston, is desirous of obtaining a copy of the Journal of July, 1915.

Dr. R. W. Werner, of Parkersburg, has taken offices in Akron, Ohio, and will soon move there.

Dr. J. E. McQuain, formerly of Spencer, has opened offices in Parkersburg.

Dr. R. F. Sayre, formerly of Mason City, has bought Dr. C. E. Park's office in Parkersburg and is now practicing his profession there.

Dr. C. E. Park, of Parkersburg, has entered a United States hospital in Washington to receive treatment. After he regains his health he will take a special course in eye, ear, nose and throat work and re-open offices in his home town.

The Athens Co. (Ohio) Medical Society held a meeting on September 7th and had as their guest one of the professors of the Western Reserve University who gave a lecture on Pediatrics. The following physicians from Parkersburg attended the meeting: Dr. Wade Gaston, Dr. G. D. Jeffers, Dr. S. D. H. Wise and Dr. S. W. Rush. All reported a fine meeting.

Dr. S. H. Burton and Dr. M. D. Cure, of Weston, accompanied by their wives, were recent visitors in Baltimore. The doctors attending the meeting of the B. & O. Surgeons and their wives shopping. Dr. Burton and wife returned the 10th to Weston while Dr. and Mrs. Cure spent sometime at the Eastern Shore.

Dr. E. T. Hall, of Weston, made a trip to Baltimore during September, where he purchased instruments and supplies for his hospital.

The last meeting of the Lewis County Medical Society was held in the parlors of the Weston State Hospital, September 16th. At this meeting it was unanimously voted to make a drive to raise $75,000 to erect a general hospital at Weston. This hospital, if erected, will be turned over to the Sisters to operate.

Drs. Law and Lawson have equipped the third and fourth floors of the Rhinehart apartments at Weston for a hospital. They have had a liberal patronage since the doors have been opened to the public. Weston has long been in need of a hospital and the people are now turning their attention to this long felt need. G. M. B.

Dr. F. L. Hupp, of Wheeling, has returned from his vacation spent at Lake George, N. Y.

Dr. Tom A. Williams, of Washington, D. C., is spending his vacation abroad. He attended a meeting of the Bristol Medical Association.

Dr. Barton B. McCluer, of Virginia, has located at Eckman, W. Va.

Dr. Harry C. Solter, of Marlington, was a recent visitor in Huntington.

Dr. J. M. Emmett, who has been connected with the Chesapeake and Ohio hospital in Huntington, will go to Clifton Forge, Virginia, to take charge of the railroad hospital there. Dr. Emmett came to Huntington from Richmond a year ago and has done general surgery.

The fourth annual meeting of the Association of Surgeons of the Chesapeake

and Ohio Railway was held at White Sulphur Springs on the 15th inst. The meeting was well attended.

Surgeons from Huntington present were Drs. W. E. Vest, R. J. Wilkinson, F. C. Hodges and C. R. Enslow, president of the Association.

The program was fully carried out and Dr. E. H. Griswold, of Peru, Ind., elected president for the ensuing year.

The committee of arrangements for the next meeting, the place of which will be determined later by the executive committee, is composed of Dr. Jas. R. Bloss, of Huntington, W. Va.; Dr. Garr, of Lexington, Ky., and Dr. Hodnutt, of Richmond, Va.

The program was as follows:

MORNING SESSION 10 A. M.

Registration.

Prayer

Introduction of Dr. C. R. Enslow, President of the Association, by Dr. W. T. Oppenhimer, Chief Surgeon The C. & O. Ry.

Address—Mr. Geo. W. Stevens, President The C. & O. Ry.

Address—Mr. J. B. Parrish, General Manager The C. & O. Ry.

SURGICAL PAPERS

Carrol-Dakin Method of Sterilizing Wounds—Dr. Thos. G. McCormick, Portsmouth, Ohio.

Mechanical Treatment of Fractures of Shaft of the Femur—Dr. Robt. K. Buford, Hansford, W. Va.

Traumatic Shock—Dr. M. V. Godbey, Charleston, W. Va.

The Treatment of Lacerated and Contused Wounds—Dr. J. L. Yelton, Augusta, Ky.

The Treatment of Non-Penetrating Head Injuries—Dr. C. C. Coleman, Richmond, Va.

Traumatic Injury to Eyeball, Emergency Treatment by General Practician —Dr. F. W. Tyree, Hitchins, Ky.

Surgical Treatment of Ruptured Bladder—Dr. Wm. A. Buchanan, Hammond, Ind.

Fractures, Personal Experience and a Suggestion—Dr. Stephen Harnsberger, Catlett, Va.

Old Infected Compound Fractures with Osteomyelitis—Dr. Albert Davis, Marion, Ind.

History and Status of Railroad Surgery—Dr. E. H. Griswold, Peru, Ind.

Pernicious Use of Tourniquet—Dr. H. A. Walkup, Dun Loup, W. Va.

Tendon Transplantation—Dr. W. T. Graham, Richmond, Va.

Visceroptosis — Dr. R. J. Wilkinson, Huntington, W. Va.

Volunteer Papers on Any Appropriate Subject.

Reports of Officers, Committees, etc.

Election and Installation of Officers.

Society Proceedings

Mercer County Medical Society met July 27th, at 3 p. m., at Mercer Healing Springs, Dr. C. T. St. Clair presiding.

The minutes of the last meeting were read and approved.

Under clinical cases, Dr. B. W. Bird reported a very interesting case and was asked a number of questions in regard to same but no one suggested an accurate diagnosis.

Under papers, Dr. S. R. Holoroyd, of Spencer, read us a very interesting paper on "Neurosis of the Housewife," which was thoroughly enjoyed and discussed freely by most of the members present. We wish to thank Dr. Holoroyd for this paper and hope that he will come again. Dr. C. C. Peters, of Princeton, read a

very interesting paper on "Health Conservation and Prophylaxis" which was freely discussed.

Following this paper Dr. Hare made a motion that the Mercer Medical Society go on record as being strongly in favor of urging the state health council through the legislature to enact a law to request health certificates for matrimony. A committee of three was appointed to draw a resolution asking the state health council to urge the passing of this law. The committee consisted of Drs. O. S. Hare, C. C. Peters and E. H. Thompson.

The application of Dr. Castello was again brought up and a report from the board of censors requested that he not be taken in this society on account of the request of the Tazewell County Medical Society as he was a member of that Society in good standing. The board of censors stated that it was not a reflection on the professional character of Dr. Castello but merely a request from the secretary of his own society. The secretary was instructed to notify Dr. Castello of the society's decision.

After the close of the scientific program the society adjourned to the dining room where we were served with a delightful banquet.

We were honored with the presence of the president-elect of the West Virginia State Medical Association, Dr. J. Howard Anderson, of Marytown, who addressed us. There were several other short talks by members present.

After the banquet some of the members and the ladies participated in dancing and others to that form of amusement that suited them best.

We all left for our homes feeling that we had had a very pleasing evening.

E. H. THOMPSON,
Secretary.

The Mercer County Medical Society met August 26th at Bluefield, at 8 p. m., with President St. Clair presiding.

Dr. Slusher gave us some very interesting war scenes with lantern slides which was enjoyed by everyone present.

Dr. E. F. Peters read a very interesting paper with a report of a case of Addison's disease which was freely discussed.

Dr. Hare read a paper on syphilis which was discussed by a number of members present. Dr. Hare's paper was excellent.

This ending the literary program a motion was made to invite the Tazewell County and the McDowell County Medical Societies to meet with us on September 23rd.

The chairman appointed the following committee on banquet: Dr. O. S. Hare, Dr. J. B. Kirk and Dr. H. G. Steele.

There being no further business the Society adjourned to meet in September.

E. H. THOMPSON,
Secretary.

Parkersburg, W. Va.,
Sept. 11, 1920.

Dr. James R. Bloss,
Huntington, W. Va.

Dear Doctor:

Received your card this a. m. and will give you an account of the last meeting of the Little Kanawha and Ohio Valley Medical Society which met at 9 p. m., September 2, 1920, after a vacation of three months during the summer.

The meeting was called to order by the President, Dr. S. D. H. Wise.

The minutes of the last meeting were read and approved.

After passing on several business matters, Drs. J. E. McQuain and W. H.

Howell gave some of their experiences while with the Medical Corps during the late war. They related many interesting experiences and their talks were greatly appreciated by the Society.

Dr. Robert L. Brown reported a case of much interest. It was of a stone in the bladder. He showed a picture of the stone in the bladder, and the stone itself after being removed. The stone after removal from the bladder weighed 12 ounces.

An invitation was sent Dr. Andre Crotti, of Columbus, Ohio, asking him to give us a paper in the near future on the subject of Goitre.

A committee of three was appointed by the president to arrange the scientific program for the next meeting.

W. B. RICHARDSON,
Secretary.

Medicine

INFLUENZA

The treatment of influenza with camphor has been used in France during the late epidemics of this disease and from all I can learn, especially from Toulouse, it would seem to have been successful. It consists of intravenous injections of camphorated serum which is prepared as follows:

In a litre of physiological salt solution, three gm. of absolutely pure camphor are allowed to macerate for not less than forty-eight hours at the temperature of the room. It is shaken three times a day, filtered and then sterilized at 110° C. and afterwards placed in sterile bottles of suitable size.

This serum contains one gm. and fifty cgm. of camphor for each litre and ten c. c. are given for one intravenous injection. It is said to possess an absolute curative value if injected during the first few hours after the onset of the symptoms but during the progress of influenza or its complications it acts as an antithermic, an antiseptic of the blood, a eupneic, tonic and diuretic. It improves the general condition, thus giving the patient a chance to ward off complications. At Toulouse camphorated serum has been preferred to other medications having a similar therapeutic action. The antithermics usually employed do not always possess a prolonged antipyretic action; some of them reduce the absorbing power of the red blood corpuscles for oxygen, depress the nervous system, weaken the hepatic functions as well as those of the kidney. This cannot be said of camphorated serum.

As compared with the colloidal metals camphor serum is superior, according to those who have used it. In doses of ten c. c. it does not give rise to chills or a rise of temperature, while its intimate action on the organisms appears to be more perfect than that of electrargol. It is to be remarked, however, that when more than sixty c. c. of the serum is injected the chills will occur.

As to the therapeutic results, it has been found that a single intravenous injection was enough, but in the last epidemic several injections of ten c. c. each had to be given, although twenty-four hours later the rectal temperature had dropped three to four degrees F., and if pulmonary lesions were present their evolution was favorable. Although like any other therapeutic measure camphorated serum has its imperfections, it nevertheless is well worth trying.—Exchange.

SERUM TREATMENT OF TYPHOID FEVER

In treating patients exclusively with antityphoid serum Rodet and Bonnamour (Bulletin de l'Academie de medicine,) claim that the administration of serum should be begun as soon as possible, but should be employed even in patients received late, always producing at least some favorable effect. The first injection consists of fifteen or twenty mils. If a reduction in temperature follows within forty-eight hours, no further injection is given as long as defervescence continues. If, however, the reduction fails to occur or the temperature reascends, a second dose of ten to fifteen mils is given forty-eight hours later. The third dose is similarly regulated and consists of only five to ten mils. Generally, three injections suffice, frequently but two, and occasionally one. In a few instances, fourth and fifth injections at the usual two-day intervals are required. More frequently, serum is repeated for recrudescence or relapse after a more prolonged period of improvement. The serum acts both on the temperature and the symptoms. It never causes the immediate rise in temperature which often attends vaccine or colloid metal injections. Often the temperature shows a marked drop within twenty-four hours after the first injection. Even if it soon reascends a forable prognosis is indicated, the temporary drop often being the forerunner of an early reduction by lysis. Sometimes the first injection is followed by a progressive, permanent effect on the temperature. Absence of effect on the temperature after three injections points to a different or superadded infective process. Toxic manifestations are reduced to a minimum by the treatment, which is contraindicated neither by hemorrhage sor an already grave condition of the patient.

INFLUENCE OF PHYSICAL EXERTION ON THE HEART

Dedichen's study of 226 ski runners before and after a 50 km. race over a difficult course, and of 361 athletes traced over six years, demonstrates that neither at the time nor later was there any injurious influence on the heart when the ski athletes were at least 20 years old, healthy and in good training. The control over adequate training is possibly not quite severe enough. Hypertrophy of the heart was found later in 13.8 per cent but nearly all the ski athletes were laborers, doing heavy work. The hospital records of 459 laborers doing heavy work showed hypertrophy of the heart in 8 per cent and necropsy records showed up to 33 per cent. In one of the ski athletes the heart was hypertrophied, 15.1 cm. in diameter, but he refrained from the sport and from heavy work for a year, and by that time the diameter was only 13.5 cm. for weight of 68 kg., height 170 cm., and in every respect the health has kept perfect to date.

THE TREATMENT OF ACHYLIA GASTRICA

Horace W. Soper (*Southern Medical Journal*, May, 1919) says that while the Ewald-Boas test breakfast may be used as a routine measure, no diagnosis of achylia gastrica can be made without the use of the fractional method. If it has been demonstrated in this way that hydrochloric acid and the pepsin and rennin enzymes are absent throughout the entire phase of digestion, and that no stomach mucus is present, a diagnosis of

simple, true achylia may be made. The diet must be arranged to protect not only the gastric, but also the intestinal mucous membrane. The cellulose and connective tissue, as well as the gelatinous envelope of the starch grain, cannot be digested without the presence of hydrochloric acid in the gastric contents, and it is impossible to supply this deficiency in achylia. Hence these foods must be prepared in such a way that they can be taken care of by the small intestine. Hydrochloric acid is administered as a stimulant to the digestive hormones. Soper prefers to give the dilute acid in fifteen to twenty drop doses, well diluated and taken slowly after meals. Every effort must be made to improve the appetite and to formulate a diet that is high in caloric value. Fats must be emulsified; those contained in meats, especially bacon, must be avoided. Butter and cream should be given freely. Starches must be finely comminuted. All meats should be boiled or broiled until they are thoroughly done, that the connective tissue may be gelatinized. Citric and lactic acids are powerful stimulants to pancreatic function, so fermented milk, orange juice, and grape fruit juice are important elements of the diet. Meat extracts should be given freely because of their stimulating effect upon the digestion and appetite. Careful and prolonged mastication will correct many errors in cooking.

When diarrhea is present it is usually corrected by appropriate diet and small doses of dilute hydrochloric acid. Constipation occurs in the majority of cases. When the colon is neither contracted nor atonic, a glass of strained orange juice on arising in the morning is usually very effective. In the atonic forms special attention must be given to abdominal supports, carefully planned exercise of the abdominal muscles, and the administration of finely ground agar agar. The spastic form of constipation may be corrected by enemata of six ounces of sterilized cottonseed oil given at bedtime and retained through the night, or, even more efficiently by direct local applications of magnesium sulphate to the spastic segments through the sigmoidoscope tube. Cathartics must be avoided.

The rules for treatment can be briefly summarized: Liberal diet as just outlined. Forced feeding must be resorted to in order to maintain a high degree of nutrition. The administration of small doses of hydrochloric acid in selected cases. The juices of the citric acid fruits, fermented milk and meat broths should form an important part of the dietary. Proper correction of constipation. Regular physical exercises. The prognosis is good in all cases of achylia, many attain very good health even though the acid never reappears. Chronic enteritis is a complication to be feared, inasmuch as the future health and life of the achylia patient depends on the integrity of the small intestine.

THE RELATION OF ARTERIAL HYPERTENSION TO NEPHROPATHIES

Mortensen (*Medical Record*) from the study of a large number of cases comes to the following conclusions:

1. The average ages in the groups presented indicate that arterial tension should be studied in all clinical cases over 40 years of age.

2. Both systolic and diastolic pressures should be studied, and when the diastolic is high, careful study of the renal efficiency should be made at yearly intervals.

3. High diastolic pressure is indicative of continual stress on the arterial system and more likely to produce renal inefficiency.

4. The renal efficiency diet test may show evidence of renal inefficiency, such as fixation of specific gravity, increase in night urine, and retention of urinary nitrogen, before positive changes in the blood pressure or positive increase in the nitrogenous wastes in the blood take place.

5. Persistent presence of albumen in the urine is not necessarily an evidence of marked renal inefficiency.

6. Observations on cases with low diastolic blood pressure justify a more favorable prognosis, regardless of the height of the systolic pressure, than a high diastolic.

Surgery

NEW SKIN SUTURE MATERIAL

The suture material used by Ochsner is made by treating silk chemically so that the tissue cells cannot penetrate the meshes of the silk. In addition, it renders the silk smoother, a little stiffer with less of a tendency to snarl, in fact, overcomes all of the objections to silk as a coaptation suture without robbing it of any of its desirable qualities. This material is said to overcome all the objections which can be raised against other suture materials.

TUBERCULOSIS OF THE APPENDIX

Margaret Warwick (*Annals of Surgery*, February, 1920) declares that tuberculous appendicitis is a definite entity which, though rare, should be considered in both diagnosis and prognosis and surely justifies routine sectioning and careful examination of all appendices removed at operation. Demonstration of the lesion may save many lives either by removal of the primary focus or by making a diagnosis so early that immediate treatment may bring about arrest or cure of the general conditions. She concludes as follows:

1. The disease may be primary or secondary.

2. Infection occurs directly from the intestinal contents or by the hematogenous or lymphatic route.

3. It may produce either the ulcerative, hyperplastic, or military type.

4. It can frequently be diagnosed only by microscopic examination.

5. The symptoms resemble very closely those of suppurative appendicitis.

GALLSTONES AND ABSCESS IN LIVER WITHOUT JAUNDICE

Slocker describes a case in which the symptoms from cholelithiasis were long mistaken for stomach disturbances from hyperchlorhydria. There was no jaundice, but the liver was enlarged and painful, the pain spreading to both shoulders, and the gallbladder region was tender. Over thirty gallstones were removed from the gallbladder, and recovery was soon complete after the partial cholecystectomy and incision of the liver which released fetid pus. He emphasizes the necessity for examination of the liver for a suppurating process in cases of gallbladder disease, and warns that the cystic duct may be compressed by glands in the gastro-hepatic omentum; swelling of the duct from the compression may obstruct the lumen and thus entail the clinical picture of gallstone obstruction in the absence of gallstones.

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SOME OBSERVATIONS ON FOREIGN BODIES IN THE AIR PASSAGES AND ESOPHAGUS

By T. W. Moore, M. D.,
Huntington, W. Va.

Read Before the West Virginia Medical Association, at Parkersburg, May, 1920.

No class of maladies is so freakish in their behavior as foreign bodies in the air passages. In one class of cases, we have the frightful agony of suffocation that so frequently follows their inspiration, intensified by laryngeal spasm. This agony of suffocation is only relieved when the lack of oxygen has abolished reflex action to such an extent, that the spasm relaxes sufficiently to permit air to again enter the lungs. Truly a frightful picture. In another class, the patient suffers very slight discomfort. The offending object lodges in the lungs, and is discovered, perhaps, years afterwards, when the patient has developed some pulmonary malady, that has varied in its complex symptoms, as seen from various angles by different observers, and the foreign body is finally revealed by the X-ray.

The X-ray is an indispensable factor in locating these bodies. The patient's statement has very little, if any value. I remember not long ago a twelve year old boy, who had inspired a cockle burr and who insisted that he had swallowed it. A slight hoarseness led to an examination with the laryngoscope, which showed the burr placidly lying upon one of the vocal cords. The larynx had become tolerant.

A colleague reports two cases illustrating this, in one of which the mother insisted that her three-year-old child had a watermelon seed in its throat. The X-ray showed a jack stone in the esophagus. In his second case, where a pin was the offending body, the patient insisted it could be distinctly felt just back of the thyroid. The X-ray found the pin quietly resting in the lower bowel.

The X-ray is not only invaluable in locating the foreign body, but also aids

materially by giving its position, e. g., safety pins, whether open or closed, and also in penetrating bodies the location of the point, etc., etc.

I wish to impress upon you today that all foreign bodies in the air passages are a menace to life and may produce death very suddenly, and that attempts at removal are often fraught with great shock from which the patient may not recover.

The bronchoscopist must in every case be prepared to hurriedly perform a tracheotomy as you will observe from a few cases, which I will describe to you.

Case Number One. The day after my return from post graduate study, including a course in bronchoscopy, a twelve-year-old girl was brought to me with the history of having inspired a piece of corn bread crust the evening before. She had had several attacks of dyspnoea, in two of which she had developed cyanosis and at one time lost consciousness for a few minutes. The patient was a very large, well developed, girl for her age. Aside from a slight hoarseness, she seemed to be suffering no discomfort.

After wrapping the girl papoose fashion, and sterilizing the bronchoscopic tube, my assistant and I attempted to introduce it into the trachea but were unable in three successive efforts to keep the child from unloosening herself and getting the tube out of the larynx, either with her hands or by movements of her body. We asked the little girl to lie on a couch, whilst we prepared for a general anaesthetic. When almost ready, the family physician exclaimed, "The child is dead!" Examination showed her to be very cyanotic and with entire cessation of respiration. I immediately did a tracheotomy, removed the bread crust, which was just below the cords. After artificial respiration a few minutes, the patient's breathing became regular and in a week she left the hospital in excellent condition.

A very interesting factor is that the family physician, who sat beside the patient's couch all the time, insists that after the patient lay down, which she did voluntarily, she did not struggle nor make any movement and he only discovered her condition when we requested him to bring her to the operating room. Case one, a failure from the standpoint of the bronchoscopist but the foreign body removed and the patient's life saved.

A few weeks later another little girl, aged seven, was brought to me with the history of having inspired a persimmon seed one week before. She was apparently suffering no discomfort, the consultation being on account of a distressing cough that had developed. The X-ray picture showed the seed in the right bronchus not far from the bifurcation. No attempt at removal was made until after the administration of a general anaesthetic, when the seed was located through the tube with very little difficulty, but it was impossible for me to make any of my forceps grasp it. After ten or fifteen minutes effort, I decided to do a tracheotomy, hoping to get hold of the seed with a pair of uterine forceps, which I had straightened but were not long enough to reach through the mouth. When the tracheotomy was completed, I opened the wound with retractors and with a fit of coughing out popped the persimmon seed. I had evidently loosened it in my efforts to remove it. I was astounded that anything so large should penetrate so far into the bronchus. The patient returned home in one week, in first class condition. Case two, another bronchoscopic failure but again the foreign body was recovered.

Case three offered much of psychological interest. A child three years of age, five days before had fallen from a porch about six feet from the ground and when found was about five feet away from the porch and beyond a carpenter's trestle which was about three feet from the porch. The child had been playing on the porch for half an hour before its fall, whilst its father was reading, and fell just after the father walked into the house. No one saw the child fall but heard it scream and finding it upon the ground inferred that it had fallen on the trestle. The child was not unconscious and there was no hemorrhage, but from the time of the fall for two days, they could not persuade the child to take food or drink, and after that period when an attempt was made to swallow fluids, they would be regurgitated at any time from a few minutes to two hours.

Examination showed nothing abnormal or no evidence of injury to the mouth or throat. I explained to the father that there must be a foreign body in the esophagus, nothing else would produce these symptoms, and he must take the child to a radiographer for a picture. This was refused on the grounds that nothing could possibly have been in the mouth at the time of the fall and the expense of the picture was unnecessary. I regretted my inability to do anything further without the picture. They left the office but the father returned, stating as I had been very kind, he would have the picture taken to gratify me.

The X-ray plate showed a coin just below the cricoid cartilage, like a breast pin, in the esophagus. The father then remembered that he had given the child a penny. The coin was removed very easily and the child ate a hearty supper, with relish, that evening, suffering no ill effects. From the statements of the family, one would expect to find some evidence of starvation, but there were none, showing that some fluids must have passed into the stomach.

Another interesting bronchoscopic case, was a woman, aged forty-seven, who thirty-six hours before I saw her had swallowed a piece of ham bone which had lodged in the esophagus about one-third of its length from the cricoid as located by the X-ray. The patient had come one hundred and forty miles on a local train. Her suffering seemed to be intense. After giving a hypodermic of morphine and atropine and anaesthetiziing the pharynx, the base of thhe tongue, and the epiglottis with cocaine, I found a piece of bone which seemed to be firmly imbedded almost transversely, due I think to an attempt to push the bone into the stomach with some instrument before she reached me. By making pressure on the esophageal wall, I was able to loosen one angle of the triangle and catch it with my forceps and remove it with very little traction. The bone was triangular in shape, each side being about twenty millimeters in length, the angles being very sharp and cutting. This patient was much prostrated for twenty-four hours but recovered rapidly after that, and returned to her mountain home the third day.

Dr. Jervey, in an interesting paper last June, called attention to a number of freak cases, where the foreign body was located by the Roerntgenogram in one bronchus and later removed from the other side, etc. Whilst I have never had any quite so extreme as Dr. Jervey's, I recall a little girl who came in stating that she had swallowed a pin and that it was sticking in her throat. The X-ray picture revealed the pin down about two inches in the esophagus with the head

down. We passed the tube to the cardiac orifice under general anaesthesia but failed to find a trace of the pin. The child vomited profusely while working with her, however, she was apparently relieved, but in one week returned, asking me to remove the pin from her throat, stating that she would do so herself if her grandma would permit.

Examination showed the pin point sticking in the upper portion of one tonsil with the head in the naso-pharynx.

Another patient came with a small fragment of chicken bone in the esophagus, located just below the cricoid cartilage, with the X-ray. The foreign body was never found, although the tube was passed daily for three days, when the patient insisted it was dislodged while eating and the X-ray no longer showed it.

Only last month a baby, twenty-two months old, with a piece of chestnut in the trachea, was brought to me. There was difficult breathing. The piece was located with the tube and looked like about one-fourth of a chestnut kernel. After using suction to remove the mucus, I could not find the foreign body but the child's breathing was normal. The X-ray the following morning failed to show it and there has been no discomfort since. I must have removed it with the suction but where it went I do not know.

My experience has been limited to twenty cases, consisting of two cockle burrs, four grains of corn, five coins, two of which were half dollars, two pieces of toothpick, one jack stone, which went on down when I endeavored to grasp it and passed through the intestines, and two fish bones, but none have afforded the varied interest of the five cases reported.

To the volumes that have been written upon the subject, I can add nothing. What impresses me most is the law propounded by Killian in his first paper on the subject in this country when he said: "The extraction of foreign bodies is a subject in itself. No general rule can be laid down, but each case is a law unto itself. It depends upon the character of the foreign body, its position and the condition of the neighboring structures. The whole mechanism of extraction often requires thorough deliberation and experience is most advantageous."

G. Killian, Trans. A. L. R. O. Society, 1907.

DIAGNOSIS AND TREATMENT OF EARLY SYPHILIS

By WILLIAM S. ROBERTSON, M. D.,
Charleston, W. Va.

Read Before the West Virginia Medical Association, at Parkersburg, May, 1920.

We meet no condition of greater interest, none of wider distribution, none more far reaching in its effects on its victims and none with so varied a symptomatology as syphilis. It has been said that to know syphilis is to know medicine for it is indeed a rare pathology that may not be simulated by this disease. Owing to its chronicity, it cannot be doubted that at any given time the percentage of those having syphilis is greater than for any other infection. Its control constitutes one of our greatest problems, the accomplishment of which would be greatly facilitated if the profession, or that part of it which treats syphilis, were not guilty of so many sins of omission. I refer particularly to the failure of the large majority of physicians who are treating lues to realize that there are indispensable aids for the

prompt and accurate diagnosis of early syphilis, and equally necessary and important guides for its prognosis and successful treatment. These aids and guides are, (1) the dark field microscope, (2) the complement fixation test of the blood, and (3) complement fixation test, the cell count and the test for excess globulin of the spinal fluid.

There is no factor in the prognosis of syphilis so vital as early and intensive therapy. It should, therefore, be the aim of every physician to make the diagnosis without delay so that treatment may be immediately instituted. A matter of a few days may determine whether the patient will recover within a short time or will have to submit to years of treatment and possibly suffer with incurable nerve lesions.

Within the professional life of most of us, the accepted practice was to withhold all constitutional treatment in cases presenting suspicious lesions until the confirmatory symptoms of a systemic invasion had occurred. This, before the discovery of the treponema pallidum, was entirely justifiable. It has been long recognized that there are no pathognomonic symptoms by which we can distinguish between herpes, balanitis, pyogenic infections, chancroid and the initial lesions of syphilis. Any two or all of these conditions may exist coincidentally, may answer any description supposedly characteristic of any one of them.

A point to be accepted is that every genital lesion should be considered syphilitic until proven otherwise. In early cases there are only two ways that the presence or absence of lues can be definitely shown; one is the dark field examination of the secretion of the lesion, and the other is the blood test. If the condition is of very recent date, say less than a week old, the dark field remains the only certain means of diagnosis. Many who treat this disease apparently are not aware that a positive blood reaction is not synchronous with the appearance of the chancre and some very unfortunate mistakes have been made on account of this fact. A positive Wassermann may appear as early as one week after the initial lesion but rarely becomes apparent before two weeks. To send the blood to the laboratory in these early cases is like making a Widal in suspected typhoid in the first week, yet it is all too frequently done. It is impossible before the blood becomes positive, to say with certainty unless the treponema has been found with the dark field that a sore is or is not the initial lesion of syphilis.

The common points of differentiation of lesions are misleading and valueless. Induration may be negligible in chancre and may be present to a marked degree in non-syphilitic sores; the treponema may be found in herpetic ulcers immediately after exposure; suppurating buboes may occur with chancre under certain conditions as well as with chancroid, pain is dependent upon various factors such as location, patient's temperament, etc., and the appearance of a venereal sore is of no positive diagnostic value; chancre is by no means always unique, in 25 percent of cases it is multiple.

Although these points were given as differential a few years ago, the very fact that at that time it was advised to withhold all constitutional treatment until the secondaries appeared proves how often the diagnosis of a sore, whether it was a local condition or syphilis, was in error. In view of these facts, it is astounding how calmly and

with what amazing assurance physicians attempt the differential diagnosis of the several lesions without recourse to any special diagnostic help, thus condemning as syphilitic many who are not infected and, what is immeasurably more tragic, overlooking the fact that an apparently innocent lesion is syphilitic. The responsibility in the diagnosis of these cases is so great that no means of arriving at the truth should be omitted. Every man who has a microscope, and every practitioner should have one, should provide himself with a dark field accessory and, to be on the side of safety, use it in every instance. It is only by following this rule invariably that we can avoid regrettable mistakes.

All of us can recall instances we would like to forget, instances where the patient might have been saved prolonged treatment and serious pathology by the exercise of a little ordinary care. Such conditions are the result of failure on the part of the medical attendant to realize the great importance of exactness in the early diagnosis of venereal infections and the strong possibility of a deplorable result if error is made. The necessity of making dark field examinations cannot be over-estimated. I have no hesitancy in saying that the practitioner who does not employ this method, is not prepared to diagnose primary syphilis. It is less serious, if mistakes must be made, that non-syphilitic sores should be branded as specific rather than that syphilis should be pronounced a local infection. In the former instance the patient would be subjected to financial loss and inconvenience of treatment only, while in the latter case a condition may well arise that in the end may prove hopeless. The time to cure paresis and tabes is at or before the time the nervous system is first invaded and not in later years after pathological degenerations have occurred.

Please note this: Treponemata can be found as soon as the initial lesion appears, long before the blood can become positive to any test, and yet it is all too common to hear of a case in which the diagnosis is being withheld for the blood reaction to decide matters. In not a few instances, I have demonstrated the presence of a chancre with the dark field, have informed the patient of his condition, have failed to convince him that he had syphilis, have had him return in a day or two and exultantly show me a negative blood report, made upon the advice of a colleague, which proved conclusively to his mind one of two things—either I had made a mistake in my diagnosis or, what is more likely from his viewpoint, I was unscrupulously mercenary.

Again let me remind you; don't expect a positive Wassermann in incipient syphilis.

The dark field in untreated chancre is nearly 100 percent positive, can be employed simply in every office and has the further advantage of an immediate, exact diagnosis, thus enabling us to attack the disease with the assurance of having recognized the true condition before the infection is generalized. The infection which has become distributed through the system presents an entirely different and more difficult problem than that of the blood negative chancre and the prognosis is affected correspondingly. As soon as the blood becomes positive, the disease is in the secondary stage, whether there are dermal manifestations, general adenopathy, mucus patches, etc., or not. In other words, invasion of the system is complete when the Wassermann becomes positive. This positive Wasser-

mann is not only the first indication of secondary syphilis, but sometimes constitutes the only appreciable sign of systemic involvement, i. e., other secondaries are so slight as to escape notice.

Of all the questions over the problems and phases presented by syphilis, none has received more attention or been debated more fully than the value and significance of the complement fixation test known as the Bordet-Wassermann reaction. A fact not generally appreciated is that this reaction constitutes only one of the symptoms of syphilis and, like any other symptom, may or may not be present. If present, it may appear as early as one week after the chancre or may be delayed for two months and, in rare instances, may fail to appear at all. Its detection is subject to error as the examination of the blood is a complicated procedure and can be done only by well qualified laboratorians.

The contradictory reports from different laboratories are no doubt due to differences in technique followed. There is a crying need for a standardized technique and if one is agreed upon there should be no discrepancies.

It must be remembered that not infrequently a positive blood becomes suddenly negative and vice versa from no ascribable cause. This doubtless accounts for some variances in reports from different laboratories. Any test that gives 100 percent positive reactions in a disease, as the Wassermann does in late secondary syphilis, and 70 percent positive in tertiary and late infections, appeals to me as of inestimable worth notwithstanding adverse criticism. Whatever its limitations and shortcomings, it is a most valuable aid in diagnosis and guide for treatment, it never errs on the unsafe side, and taken with the other symptoms of the disease as they exist or have appeared, no confusion should arise for the clinician.

The following points in regard to this reaction are accepted as true:

1. A positive Wassermann reaction in the temperate zones means syphilis, and only syphilis.

2. A negative Wassermann reaction does by no means indicate the absence of syphilis.

3. There is no such thing as a doubtfully positive reaction. A reaction may be *feebly* positive, but the reaction must be undoubtedly positive or undoubtedly negative.

4. The spinal fluid may show a positive reaction, and the blood, at the same time, be negative and vice versa.

5. The clinician is better prepared to determine the exact interpretation of the serologic reaction than the laboratory worker.

6. Even with a positive Wassermann reaction a given group of symptoms in a known syphilitic is not necessarily due to syphilis, in other words, your syphilitic patient may be suffering from an entirely different and additional malady.

7. The Hecht-Gradwohl modification of the Wassermann gives thirty percent more positive reactions than the original technique. The Wassermann is often negative when the Hecht-Gradwohl is positive but the reverse never occurs. In all cases the Wassermann becomes negative earlier than the Hecht-Gradwohl, hence the latter is by far the more reliable test.

8. In some instances a persistently positive reaction remains in spite of all treatment; there are no clinical signs of syphilis and the only evidence of the

disease is the blood reaction. These cases should always be kept under observation.

Quincke's lumbar puncture and the laboratory findings of the spinal fluid and their significance together constitute the third indispensable aid in diagnosis, prognosis and treatment. Until comparatively recently tabes and paresis were thought to be late or parasyphilitic manifestations. Today we recognize that these affections begin at the general syphilotoxic or secondary stage. This alteration in and addition to our knowledge is due largely to the examination of the spinal fluid in the early stages of the disease; it is known that 93 percent of all spinal fluids in the late secondary stage show evidence of pathology of the central nervous system. It is further accepted that an increased cell count and increased globulin alone, even in the absence of a positive Wassermann of the fluid and of clinical symptoms, is enough to determine the presence of cerebrospinal involvement. Like the blood, the spinal fluid may be negative pathologically even in advanced conditions, particularly is this true if the lesions are deeply placed in the nerve parenchyma. The real value and important point derived from spinal puncture and fluid findings is that the nervous system is early involved and as long as the fluid shows evidences of pathology we are not justified in discharging the patient as cured, no matter what the paucity of other symptoms. The spinal fluid must be examined in every case of syphilis, not once but repeatedly. This appears to me of more importance than submitting the blood to the laboratory.

Noguchi's luetin reaction (analogous to the cutaneous tuberculin test of Von Pirquet) has little importance in primary and secondary syphilis as it is rarely positive in the earlier stages. In late and in hereditary syphilis its originator claims for it great significance in diagnosis. According to him, the reaction occurs only in syphilis, is most constant and intense in tertiary, latent and hereditary cases, but is usually absent in the primary and secondary stages. The presence of excess iodin invalidates the test as it is said to be always positive if this drug has been used within 30 days.

TREATMENT

The drugs employed in treating syphilis are mercury, arsenic and iodin, the anti-syphilitic triad. Volumes have been written regarding the respective methods of the first two, mercury and arsenic. Wechselmann of the Virchow Krankenhaus in Berlin, who has had more experience with the arsenical preparations than any other man, having done all the clinical work for Ehrlich, is an advocate of arsenic only, while Buschke, a member of the same staff, employs mercury as the only drug. These two have followers here and abroad in about equal proportions but the happy medium would seem to lie between these two extremes. As each of these two drugs is effective in destroying the treponema and in removing clinical symptoms, it is perfectly logical to employ both and most syphilogists do.

Arsenic, as exhibited in Arsephenamine and Neoarsphenamine, appears to be the more valuable drug, certainly in early syphilis. Nothing has been accomplished with mercury comparable to results obtained with arsenic in the treatment of recent infections. Symptoms literally melt away. It is by no means rare to effect a cure of a Wassermann negative syphilis, that is, when the disease is largely a local affair, with a single brief intensive course of arsenic. It has

been stated by one writer that, given such a case, prompt recovery can be expected in every instance. The ever increasing number of second infections in the same patient bears strong testimony as to the potency of the arsenical compounds. Before the advent of Ehrlich's discovery, a second appearance was a medical curiosity; today it causes little surprise. Furthermore, while Ehrlich's belief that he had originated a remedy, one dose of which would sterilize every patient infected with syphilis, survived but briefly, it is asserted by syphilologists of undoubted ability, that his hopes have been realized in some few instances.

Syphilis can be treated successfully with either arsenic or mercury alone, but better by a combined use of the two drugs. The earlier treatment is instituted the better the prognosis. The best way to control the infection is to administer the therapy in courses with short periods of rest between. A course comprises, for example, six doses of Arsphenamine or Neoarsphenamine and twelve of Hyg. Sal. grs. 2, given as follows: The arsenic intravenously at four to six day intervals, followed by the mercury intramuscularly at approximately weekly intervals. According to the physician's preference Arsphenamine or Neoarsphenamine may be employed. I have been able to detect no difference in the therapeutic value of these two preparations. Any salt other than the salicylate, or metallic mercury itself may be employed as preferred by the medical attendant. In any event, the drug must be administered to the patient's tolerance. No better clinical results are observed from full doses of Arsphenamine than from half or two-thirds maximum doses and as the untoward effects of the latter are practically nil, the smaller doses seem preferable.

A plan for course treatment which may be altered as deemed advisable by the physician, is as follows: Administer gm. 0.3 of Neoarsphenamine as the initial injection to determine patient's tolerance for arsenic, follow with six doses of Neoarsphenamine gm. 0.6 in this order: the first, two days after the test dose and the others at four to six day intervals. Three days after the last dose of Neoarsphenamine, begin with mercury salicylate gr. 2, in the gluteal muscles and repeat weekly until twelve doses are given. The kidneys must be watched carefully in all these cases.

(Note—Any routine treatment for syphilis is certain to be followed by disappointment. It cannot be too strongly nor too often emphasized that the therapy employed must be adapted to each case. In some instances the arsenic preparations should be given in full doses on each of three or four successive days, and repeated in two or three weeks; in others a minimum dose at long intervals is all that is indicated. There is no condition whose treatment requires a sounder judgment, a greater care and a fuller appreciation of the needs of each individual case than syphilis. To disregard these points is to court disaster.)

In the treatment of syphilis, which is Wassermann negative, (primary syphilis) one such course as outlined above will, in many instances, be all that is necessary. In these cases of primary syphilis, it is logical to excise the chancre if favorably located, thus removing the original source of treponema supply. Further treatment of these Wassermann negative cases is guided entirely by serological findings in blood and spinal fluid. If, however, the Wassermann is positive when first seen, two courses are given with intermission of four to six weeks between. After the second course, treat-

ment is withheld except as indicated by laboratory findings or clinical symptoms.

Fortunately, most syphilitics recover if energetically treated but a certain number offer difficult problems. We often find infection of the central nervous system uninfluenced by enormous amounts of intravenous and intramuscular treatment. Whether we accept intraspinal therapy as valuable or not, we are forced to admit that in many instances other treatment proves insufficient and ineffectual, establishing a negative blood and removing most clinical symptoms but not affecting conditions of the central nervous system as indicated by clinical symptoms of neuro-syphilis, and evidences of pathology in the spinal fluid. How shall we deal with these cases? What conclusions can we draw from the treatment of cases which have had dozens of intravenous injections, together with intensive mercurial therapy, without appreciable benefit and show immediate improvement after one intraspinal treatment? It is my firm conviction that some of these cases of neuro-syphilis derive benefit from spinal drainage following an intravenous injection of arsenic, as advocated by Dercum and Gilpin. Until the origin, function and mode of absorption of the cerebro spinal fluid is definitely determined, we cannot assume too dogmatic an attitude on this question, either as regards the efficacy of this treatment or the preferable technique to follow. It is a subject requiring much thought and deep study and it would be well to retain an open mind and not accept or condemn the procedure entirely for the present.

The rectal administration of the arsenic preparations has received some attention. Prepare as for intravenous use and inject slowly into the lower bowel. The therapeutic effects are said to be satisfactory. I have had no experience with this method.

Hyg. by mouth is serviceable, provided you can be sure the dose is maintained to the patient's tolerance. The difficulties are evident. Inunctions are effective when properly given, but have obvious drawbacks. Iodine has no place in the treatment of primary or secondary syphilis.

The points in dealing with early syphilis upon which particular stress are to be laid are as follows:

First—A positive diagnosis of syphilis can be made with the dark field before the infection is generalized.

Second—The prognosis is immeasurably improved if the treatment is begun before the system is swarming with the treponema.

Third—Repeated examinations must be made both of blood and spinal fluid to determine, in the absence of clinical symptoms, the necessity for additional treatment.

Fourth—Only when the findings of the blood and spinal fluid are repeatedly negative and the case is clinically free of evidences of the disease, are we justified in discharging the patient as cured.

CONGENITAL ABSENCE OF THE VAGINA — REPORT OF TWO CASES WITH RESTORATION BY THE BALDWIN METHOD

By WADE H. ST. CLAIR, M.D., F.A.C.S.,
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Read Before the West Virginia Medical Association, at Parkersburg, May, 1920.

Congenital absence of the vagina, among other anomalies of the female generative organs, requires for its full

explanation some intimate knowledge of fetal development. The Wolffian ducts, which appear in the embryo about the fifteenth day, and the Wolffian bodies, which appear somewhat later, are the first structures indicative of the genito-urinary organs and represent the future kidneys and genital apparatus. These structures are in pairs, lying on either side of the median line. Other important developments are the Muellerian ducts, one appearing near the Wolffian body of each side. The Wolffian ducts go to form the excretory ducts of the genital apparatus in the male, while the Muellerian ducts serve a like purpose in the female. A part of the Wolffian bodies finally forms the genital glands, the ovary in the female and the testicle in the male. It follows therefore that the Wolffian bodies and the Muellerian ducts only are of importance in genital deformities of the female. The fusion of the ducts of Mueller in their lower part forms the vagina and uterus, while the upper portion remains separated and forms the Fallopian tubes. The lower end of the canal (future vagina) formed by the fusion of the Muellerian tubes is closed at first, but later the lower part of the septum, which shuts off this canal from the uro-genital sinus, breaks down and permits the canal (vagina) to communicate with the uro-genital sinus. A failure of this septum to break down results in common abnormality, an imperforate hymen. Imperfect canalization of the fused Muellerian cords, no canalization at all, or a persistence of the septum between the fused tubes, in part of their extent or throughout, could give rise to atresia of the vagina, absence of the vagina, double vagina, absence of the uterus, double uterus, and the various types of bicornate uterus. Anomalies of the ovaries are dependent upon an atypical development of the Wolffian bodies and are not necessarily related to faulty development of the uterus, tubes and vagina. Finally, owing to their intimate connection in fetal origin, anomalies of the genital organs are apt to be associated with abnormalities of the urinary tract. A hypospadias is a pertinent case in evidence. Recently Judd, of the Mayo clinic, has elaborated upon the occurrence of an ectopic kidney as an associated condition in anomalies of the internal generative organs.

Most of the cases of anomalies of the female genital organs do not come under observation until puberty, when menstruation is not normally established, or until even later when, by reason of the deformity, the sexual life is not normal or the child bearing function is absent or attended with difficulty. Relief then naturally depends upon the nature of the deformity. Some of the abnormalities are but simple problems of minor surgery, others present perplexing difficulties, and many are not amenable to correction at all. An imperforate hymen or a septum forming a double vagina requires neither ingenuity nor any great amount of operative skill for correction. Many cases of atresia of the vagina do not present more difficulties. Operations aiming at the restoration of function in anomalies of the internal generative organs belong to speculative surgery, and the chance of fruitful result is extremely small. Reconstruction is usually impossible.

Congenital absence of the vagina, existing alone or associated with a rudimentary uterus or a total absence of the uterus, is among the major defects of development and presents interesting problems in reconstruction surgery. These cases are without the menstrual function, the sexual life is abnormal at

least, and the child bearing function does not exist. Restoration of the vagina necessitates an operation which entails some risk to life, but restoring the sexual function to some sort of degree, these patients are usually willing to assume the risk. Former attempts at constructing a vagina by the transplantation of adjacent skin surfaces over the walls of an opening made in the connective tissue between the bladder and rectum have generally ended in failure, contracting scar tissue having destroyed the new vagina in all cases in a comparatively short time (Crossen). In 1907, by utilizing a loop of intestine in a combined abdominal and perineal operation, Baldwin devised a method which gave a permanently useful vagina. This operation carries with it the usual risk of any deliberate resection and anastomosis. The results, however, are extremely satisfactory. Another method devised by Schubert and reported in 1914 utilizes a resected portion of the rectum for the plastic work of restoring the vagina. It has also given satisfactory results, is probably a more difficult operation to perform, but it has the advantage of not invading the peritoneal cavity with its attendant dangers.

Two cases of congenital absence of the vagina have come under the service of the author at the Bluefield Sanitarium, one in 1917 and the other in 1918. The cases are rather unique in that the anomaly was present in two sisters. The Baldwin method was used in both instances, with results exceedingly satisfactory. The cases are rather typical, and full details are reported.

No. 1602. A girl of 18, to all casual appearances normal, entered the Bluefield Sanitarium March 7, 1917. Her mother died at the age of 47 of tuberculosis. She has one sister married, with children, another aged 23 who has never menstruated. Her doctor sent her in as a case of imperforate hymen. She is uncertain about her menstruation, but thinks she had some flow once or twice. She has had no evidence of a period for over one year. No illness has been complained of incident to not menstruating.

Physical examination reveals a girl well developed, with sex accentuated, and normal in every detail except her genital organs. The labia are normal, and the hymen appears imperforate. Introducing a finger into the rectum, the hymen can be everted. The finger still in the rectum, no evidence of a uterus can be made out between it and the hand on the abdomen.

The patient was told that her vagina and uterus were absent, that the vagina could be restored, but that the operation entailed a certain amount of danger. She was willing to assume the risk.

Operation. March 8, 1917, and July 19, 1917. Ether anaesthesia. The Baldwin method was used, and the operation was done in its four stages and two anaesthesias. In the lithotomy position, a tranverse incision was made into the hymen, through which the space between the bladder and rectum was opened up and dissected free up to the peritoneum. A closed long forceps was introduced well against and bulging the peritoneum inward, and left in place. The patient was now placed in the dorsal position, and the abdomen was opened in the middle line. A little thickening about the size of the little finger existed at the site of the uterus; the right ovary was normal and surrounded by the fimbriated end of a tube which was two inches long and fused with the peritoneum at its proximal end; the left tube and ovary were absent. A section of ilium 10 inches in length, its distal end 5 inches from

the ilio-caecal valve, was found to have a mesentery of sufficient length, and was then resected, both ends of the segment being closed with a purse-string suture and inverted. The continuity of the intestinal canal was restored by an end-to-end suture anastomosis. An assistant manipulating the forceps in the newly made space for the vagina against the peritoneum, the overlying peritoneum was opened from within, and the forceps was caused to grasp the center of the loop of gut and deliver it into the space which it is intended to line. The periteneum was now carefully closed behind the loop, due care being taken not to constrict the mesentery. The abdomen was closed, and the patient was again placed in the lithotomy position. The intestine which is now double-barrelled, was opened at the point grasped by the forceps, both limbs sponged out with moist gauze, and the edges of the opening sutured to the skin margin. The two limbs were lightly packed with gauze in order that the peritoneal surface of the bowel would be pressed against the surrounding raw surfaces.

The duration of the operation was one hour and twenty minutes. The patient made an uneventful operative recovery and was temporarily discharged in about three weeks. She was readmitted on July 19, when, under other anaesthesia again, the final step of the operation was done. The external opening, found to be slightly small, was enlarged. A long-jawed pair of forceps was caused to grasp the septum between the two limbs of gut, the forceps cutting through by pressure necrosis in five days. Final discharge July 24.

This patient has been seen once or twice since operation. The vagina is roomy and deep, but there is some redundency of mucous membrane which has a tendency to protrude. A removal of the redundent membrane has been advised. The patient has been married over a year, and in a recent letter from her in Idaho, she states that her married life is quite satisfactory.

The second case of this anomaly was in a sister of the foregoing case. She had never menstruated herself, and it was in the course of a visit to the hospital with her sister that she presented herself for examination, when the anomaly was recognized. The special points of interest in her record are as follows:

No. 8220. A married woman, aged 23, apparently normal, was seen first in 1917. She had never menstruated. She has been married six years and states her sexual life has been normal. She and her husband parted after five years. Between the time of this examination and her operation one year later she had some abdominal pain which was diagnosed as an attack of appendicitis. The excellent results obtained in the case of her sister persuaded her to enter the hospital on May 29, 1918.

Examination of this patient shows that she is exceptionally well developed, weighing 153 pounds, breasts large and sex otherwise accentuated. The labia show good development. There is a dimple one inch in depth, with apparently an imperforate hymen. This dimple no doubt has served to some degree the purpose of a vagina. Bimanual examination reveals the absence of a uterus.

Operation. May 30, 1918, and Sept. 4, 1918. Ether anaesthesia. The operation in every essential detail was similar to the one already done, except that the findings consisted of a tranverse bar at the site of the uterus, with no evidence present of either tubes or ovaries. It is possible that some ovarian tissue existed in the ends of the tranverse bar, though

this was not demonstrated. The appendix contained some adhesions and was removed. In opening and dissecting out the space between the bladder and rectum, a rent was made in the bladder, which was immediately closed. In view of the redundency of mucous membrane in making the loop for the vaginal space, the patient made an uninterrupted recovery, was discharged temporarily from the hospital, and was readmitted on Sept. 4, when the division of the septum was effected and the operation completed.

This patient has been seen several times since her operation, the last time a few weeks ago. She has a normal vagina in both size and depth.

ESSENTIAL RENAL HAEMATURIA —WITH THE REPORT OF TWO CASES

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Read at the Annual Meeting of the West Virginia Medical Association, at Parkersburg, May, 1920.

It is not my intention to attempt to cover the entire field of Haematuria, and I will assume that lesions in the urethra, prostate and bladder have been differentiated and excluded as well as those of the kidney such as stone, trauma, malignant tumors, parasites, chemical poisoning, hemophilia, etc.

I shall limit myself to those conditions of haematuria in which none of the above causes can be demonstrated and confine my remarks to essential Renal Haematuria which has also been called by various names, such as Renal Varix, Renal Epistaxis, Idiopathic Renal Haematuria, etc.

The bleeding in essential renal haematuria may come from one or both kidneys, though usually it is unilateral. All the cases that have come under my observation have been from one side. Cases are on record where bleeding has been unilateral and for which a Nephrectomy has been done and later the other kidney bled likewise.

The treatment that is outlined in this paper is not an original idea. It is brought to your attention in view of the fact that it occupies rather a secondary place in comparison with other measures suggested in the control of this condition. It was first tried by the writer in nineteen thirteen when treating some cases of Pyelitis at which time a case of Renal Haemmorrhage came under my observation. This case had resisted all other expectant measures and failed. The result has been satisfactory in this case. Dr. John T. Geraghty was responsible for the suggestion of the same and I believe both Geraghty and an Italian Urologist (whose name I cannot recall) were using the same method about the same time.

One of the things that had been used in the pelvis of the kidney in this case was adrenalin but the bleeding continued after a few days following the treatment.

Two cases were referred to me by Dr. U. L. Dearman in November, 1919. They were so near alike in all their clinical manifestations I shall outline my findings and treatment accordingly. Both were females between the ages of forty-five and fifty. The family history in neither showed any of importance. They both expressed themselves as having been weakly all their lives but nothing of importance was brought out in the general history. In one case five years previous

she had noticed for one day only a trace of blood in the urine which disappeared of its own accord.

Both patients had borne children, labors being normal and without the use of instruments. In one there was a vaginal tear with a resulting cystocele which had given her some trouble. A general physical examination was negative. In one case there was an occasional dull ache in the right side, a slight amount of tenderness but no pain and certainly not even an intimation of colic at any time.

The usual steps were taken to rule out stone, etc. The chief symptoms complained of in these cases were bleeding, the urine for three weeks had contained a large amount of blood, no clots and had resisted the usual treatment of rest and internal styptics. They both complained of being tired and weak. General physical appearance fair. Both were below weight, appetite poor and were very much concerned about the blood in the urine.

Following their being placed in the hospital and resting for twenty-four hours a cystoscopy was done. The cystoscope enters the bladder with ease and a general view of the bladder wall is negative. Both ureters are plainly visible and each time the right kidney functionates a red jet is seen to gently float into the clear bladder media.

A No. 6 flute end ureteral catheter is passed up each ureter with ease to the pelvis. There is no obstruction met and at no time is there any resistance offered to the passage of the same. Specimens were collected from both sides for further study and a functional test done with Phenol-Sulphone-Pthalein. All the tests were negative otherwise than the presence of blood in the right side.

Before removing the catheters five c.c. of a one per cent solution of Silver Nitrate was slowly injected through the catheter into the pelvis of the right kidney, and the catheter immediately withdrawn. In one case there was no reaction whatever. In the other the reaction was noticeable. A slight rise in temperature the same evening, some colicky pains and the passage of a few small clots. These subsided in the course of twenty-four hours as well as the bleeding had lessened very materially in both cases. Within less than a week's time a second treatment was given. This time the same amount of solution was injected but the strength was increased to two per cent. The reaction that followed was not even as great as the first. The bleeding had almost ceased before the second treatment was administered and within a few days following the second treatment it had stopped entirely.

There has been no return of the same now for six months and both patients report that they have gained their usual strength and are able to do some of their housework.

I wish to repeat before making a diagnosis of Essential Renal Haematuria every other cause of bleeding from the kidney must be excluded. Great care and thoroughness must be exercised in carrying this out and it is often a difficult procedure. The presence of other elements than blood in the urine is of great importance. The use of the X-ray, the injection of Thorium, and the wax tip catheter are of the utmost importance. It is needless for me to repeat that a separate and total functional test must be done in every case.

In the general physical examination cardiac and hepatic disorders must not be overlooked.

The conflicting views on the pathology of this condition and the contention as to the pathologic lesions leading to this

condition rather lessens the practical value of the same. In reviewing some of the literature on this subject I am rather inclined to favor some form of Nephritic change which is in all probability focal in its nature, and which is even difficult to demonstrate in any case.

There are, however, other causes offered. Obstruction to the urinary outflow as stricture of the ureter and ulceration of the stricture area is offered by Dr. Guy L. Hunner as a cause with conclusions drawn from the report of several cases treated by dilitation alone with a resultant cure.

I shall not go into the surgical measures used to control haemmorrhage of this type. In conclusion I wish to say that in view of the fact that this form of treatment has not only been successful in my hands but others as well it should certainly be accried out in cases of this type to control and stop the bleeding.

THE AFTER CARE OF THE PATIENT AND HIS LENSES

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The after management of the patient for whom lenses have been prescribed is one of the most important phases for both the patient and the prescriber, but with this knowledge it is slighted in phthalmological writings. Its proper consideration can only be approached after scientific examination, appropriate prescription and careful adjustment of frames and lenses. It should also be remembered that our attitude toward the patient during the examination will greatly influence their reception of the lenses prescribed as an example: It frequently happens that a patient thinks that he made a serious error during the examination when questions are difficult and sometimes impossible to answer. He should be reassured that each lens was repeatedly tested and checked so that if he made several mistakes during the examination it would not affect the result. To embarrass a patient and doubt the result of your examination it is only necessary to tell him that he is stupid and inattentive. A stupid patient is helped more by encouragement and assurance that he is doing well than by any other means that I know of, and the after management will be more productive than if he has been rebuked.

I think that no one will doubt the fact that a patient antagonistic to the examiner or the lenses will receive less benefit from the lenses than one who has cooperated, therefore we must try for the patient's co-operation to produce the best results. The patient's co-operation depends upon the following factors: on his preparation for the examination, intelligent and painstaking examination, and the advice and help given after the lenses have been prescribed. For it is not only the physical but also the pschyical element brought into play to have the eyes used harmoniously, it is an acknowledged fact that although a patient has secured the best lenses possible, he may continue to experience difficulty in using his eyes, for a time. Other factors must not be lost sight of because of their direct and indirect bearing on the subject as, the patient's general health, the influence of near or distant organs and their secretions, the condition of the circulatory, gastro-intestinal, nervous and muscular systems, the amount and nature of the eyework required and all extraneous influences such as ventilation, illumination, exercise, etc. These

factors are as variable as there are types of patients, and no two are alike. Space forbids a more detail enumeration of these factors, it may be correctly stated that each patient is a law unto himself. The more thought we give to the difficulties the eyes must surmount that the patient may use them correctly the more our amazement that so many are aided by lenses alone, especially when they are incorrectly prescribed.

INSTRUCTIONS OF PATIENTS

The ohthalmologist should prepare his patients of the difficulties to be overcome while becoming accustomed to the lenses. Some will object by stating that this disappoints the patient and removes the patient's faith which is a strong pschyic help during the days or weeks of trial. However, it seems to the writer that such an education is a help, forewarned is forearmed. For it happens that patients expect immediate relief, and the prescriber will then have great difficulty in securing further faith and co-operation. It is well known that lenses, medicine and all other therapeutic agents sometimes help by their mere suggestion but even in such cases preliminary warning will not lessen this therapeutic aid. Whereas if the patient does not have immediate relief his surprise and grateful acknowledgment will not be lessened by the instructions given.

Experience has led me to believe that physicians have neglected a valuable adjunct to their prescribing when they do not give printed instructions and explanations to their patients. Lack of time precludes oral instructions and during office visits he may not be in the frame of mind to receive or remember our prolonged instructions. Our work is very complex and requires that years be spent in preparation under those properly qualified to teach and more years in the hard school of experience, before he understands or appreciates his province in particular cases. How can we, therefore, as a profession expect blind obedience or intelligent co-operation without instruction in these days of many false gods?

On the patient's first visit to my office, whether a cycloplegic is prescribed or lenses are to be given for the presbyope, a printed pamphlet is given to each patient which he is to read and carefully keep for future reference. I place my name on it that it shall be authorized and be given due weight. These printed instructions reduces the difficulties of future explanations, for I now find that I spend a fraction of the time I formerly did in explaining away real and supposed difficulties.

PAMPHLETS IN BRIEF

The pamphlets must have certain underlying principles incorporated in them; they must be brief, simple in phraseology, and interesting to the patient. Men who live in large cities will naturally not need certain parts, and every experienced man will think of certain points that can be added; they can be changed to suit the individual prescriber's needs and views. I use two pamphlets, one type for the routine case which has special instructions as he needs them, and the second pamphlet for the myopic and the highly astigmatic who have need of special instructions in the use of their eyes and the care of their frames and lenses.

The pamphlet given to all cases contains the following in detail to have the patient thoroughly understand the reason for the advice given: The action of the cycloplegic is told, the reason why it is given, its inconveniences, temporary

action and why physicians only are permitted to use it. The blurring and other annoying experiences that occur when lenses are first used. The proper position of lenses before the eyes, the adjustment and alignment of the frame, the care of the lenses and frames. The length of time glasses are to be worn and how that time varies with the individual. That different eyes myopics, astigmatics are a rule unto themselves. That lenses are for refractive errors and not non-refractive diseases of the eyes. Why training and experience of the examiner are more important to the patient than guarantees which cannot be fulfilled and the class of patients that do not require refraction but medical treatment. That during the examination several mistakes in the answers of the patient do not influence the result as each step of the refraction is gone over to check any errors. How glasses should be sent through the mails and not sent. The care of bifocals, their advantages and disadvantages, why more useful to some than others and how they should be worn.

For the myopic and astigmatic the following pamphlet is given: What a myopic eye is, what progressive myopia is, its ages of progressing, its dangers and the following rules:

1. Distance for near work.
2. Correct posture for near work.
3. Rest periods during near work.
4. Complete instructions for the illumination, especially when reading.
5. Care of the eyes and body in children with progressive myopia and astigmatism.
6. The style of print and the paper, for reading.
7. The low grade myope discarding glasses for near work.
8. Frequency of examinations.
9. Importance of caring for the lenses and eyes.

OTHER REMEDIES

Space does not permit the various ways and means that are to be used to influence the eyes. But two special helps that have been productive of good I shall refer to as follows: Patients who have a low manifest hyperopia and a high latent hyperopia with their full correction or almost their full correction but who cannot see well for distance, especially if the blurring persists for some time are given a weak solution of a cycloplegic as atropine or hematropine 0.01%. They are instructed to use just enough to clear the excessive distant vision but not to blur for near. Again a few patients are benefited through their first troubles by small doses of the bromides, some are helped by the eliminative treatment.

It is often difficult to care for the individual patient but accurate lenses often require considerable attention and broad sympathetic treatment, that sometimes require the attention of the internist.

THE PRESENT STATUS OF VENEREAL DISEASE CONTROL IN WEST VIRGINIA

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Read Before the Eastern Panhandle Medical Society at Harpers Ferry, September 15th, 1920.

It has now been two years since the United States Public Health Service, cooperating with the West Virginia State Department of Health, established the Bureau of Venereal Disease. The excessive prevalence of the venereal diseases

in the army had been traced back through draft examinations to civil life, and the necessity of its control was no longer an apparent duty but an actual necessity, if state and federal health officers hoped to longer deserve the name of public benefactors.

The first year's work in West Virginia was largely one of education and the perfection of an organization, the expense of which was borne solely by the federal government. The second year's work, which has been financed equally by the federal government and the state, has been largely one of control in which law enforcement and the report, treatment and follow up of cases has received most of our attention, but in which educational propaganda has not been neglected.

Prior to 1918, when the Bureau was established, no attempt had been made at the legal control of venereal disease. There were sixteen diseases rated as infectious or contagious by legislative action or State Board of Health regulation, and met with universal approval.

This was not the case with the law relating to the report and quarantine of syphilis, gonorrhea and chancroid. In the attempt to enforce the law governing these infectious diseases many obstacles were encountered on account of the attitude of the general public to look upon them as unmentionable, and also from a certain element who favored the retention of the "Red Light" or segregated district.

In many instances neither the law nor the intents of the law were understood, and our effort did not receive the hearty support of the medical profession nor the public. Few people had any conception of the vast extent to which venereal disease has spread or the disastrous results directly attributed to them. I feel that we are now justified in saying that most of the prejudice against this Bureau has been removed, and a better and clearer understanding now prevails among the medical profession and the laity as well.

I also feel justified in claiming this to be due very largely to our effort at education and publicity, in which we have made every effort in our power to let the public know the truth about venereal diseases, and to create a demand for law enforcement by the people themselves, and in this way smooth the path of physicians and health officers in fulfilling their part of the legal requirements in the report of cases and the subsequent control of them, when restraint or quarantine becomes necessary.

During the fiscal year ending June 30th, 1920, there were: 11,650 cases of venereal disease reported to the Bureau; 1,126 of these cases treated free in our clinics; 2,564 other cases were to our knowledge treated in other hospitals; 2,671 ampules of arsphenamine were furnished for free treatment by us; 540 persons were arrested and examined, of whom 378 or 71% were found infected; 187 persons were quarantined and actually deprived of their liberty; over 50,000 pamphlets were distributed, and about 300 showings of moving pictures and stereopticon slides. I made addresses at 156 meetings, which were attended by a total of over 20,000 persons. We have resorted to court action in 47 cases and secured conviction in more than half of them.

These things enumerate some of the most important parts of our work, in addition to which we have sent out weekly letters to each physician in the state, and press bulletins to all newspapers.

The weekly letters have stimulated many replies from physicians and raised

many questions, which I believe have been answered to the general satisfaction of all the profession.

The newspapers have almost unanimously printed our bulletins so far as space would permit, and by editorial comment and otherwise, have given us valuable moral support.

We have answered more than 1,000 letters of inquiry from those who fear they are infected and have directed them to some reliable physician or to one of our clinics. The freedom with which people write us, the confidence they place in our ability to help and advise them, can only be properly appreciated by fulfilling the expectations to the utmost. Every letter receives special attention and a personal answer. Our correspondence in this respect has brought to our knowledge and attention a great many unusual and often pitiful conditions of which the general public never hears.

It being apparent that many physicians lacked proper knowledge and technique in the treatment of venereal diseases, and were greatly handicapped thereby, the Bureau in the month of January, 1920, conducted a school of instruction in Charleston. This school lasted a week, was attended by over fifty physicians who had an opportunity to witness operations on over 100 patients and learn the uses of all the newer remedies. As a further aid in this we are planning to hold another school early in 1921.

Druggists, dentists and other professional men are giving us valuable support, and the barbers and undertakers of the state are helping to distribute literature and information. In the beginning of the work nearly every drug store in the state carried in stock many kinds of nostrums for the self treatment of venereal disease. Now very few do it and none of the better class do so, and it would be easy to eliminate it entirely if physicians could be persuaded to always prescribe and never dispense in treating these diseases.

Fully ninety per cent of the druggists of the state have signed pledge cards promising their full co-operation in the work, but like the medical profession, it is likely that there are some stubborn spirits who may yet have to be prosecuted, but a systematic canvas of cities and rural communities as well, convince me that most of our physicians and druggists are loyally trying to comply with our venereal laws, and doing their part in educating the public.

Barbers have also signified a willingness to help in our campaign of publicity and education. Questionnaires were sent to all barbers in the state seeking certain information and asking their aid in distributing literature. I was surprised at the high class of the answers received. They show a considerable degree of education and culture as well as a command of good English in writing. One thousand copies of the book, "Fighting Venereal Disease," have been placed in the barber shops of the state where I feel they will do their part in educating the public in this important work.

Up until July, 1919, the state furnished no means for making the Wassermann test, and it was not until the Bureau of Venereal Disease agreed to equip the State Hygenic Laboratory for the work and guaranteed the expense that this test was made. It is made free in all charity and public health cases, with only a nominal charge of three dollars to those able to pay. During the fiscal year ending June 30th, 1920, nearly 3,000 tests were made, and the fees received more than pay the expense. It is now

plainly apparent that no department for the control of venereal disease could operate long with any degree of success without convenient facilities for the Wassermann test and dark field examinations to say nothing of gonorrhea smears. It is no longer an apparent disgrace to have a blood test made, and many people now realize that syphilis at least is only incidentally a venereal disease, and do not hesitate to ask for a blood test when any suspicious symptoms appear.

There are 842 licensed physicians in the state who did not report a case in the past year, but a very large part of them do not treat this class of diseases. Another considerable number live in rural communities where cases rarely occur, and many others have retired from practice or for some other reason are no longer active professionally.

Questionnaires were sent to these 842 physicians and the answers received are tabulated as follows:

Do not treat venereal diseases	68%
Have had none to report	24%
Pure carelessness and negligence	5%
Did not understand the law	2%
Just contrariness	1%

In all our correspondence I have aimed to keep the high ideal of ethical law abiding unselfishness always before us.

The entire subject has been brought to the attention of the judges of our courts, district and prosecuting attorneys, mayors and city officials and all officers and others charged with duty in the enforcement of laws.

From institutions of higher learning, county, city and high school superintendents, we have received many assurances of approval and hearty support.

Without distinction every class of people has been appealed to in an effort to arouse and educate the public. Among the many letters on file in the Bureau, endorsing and commending work and pledging support, are communications from Senators, Congressmen, State Lawmakers, Judges, Clergymen, Educators, Physicians, Druggists, the press, organized workers and the general public.

Requests for advice and literature are being constantly received from anxious parents and interested boys and girls.

A "Keeping Fit" campaign was instituted in the fall of 1919 with the aim of reaching at least 50% of the boys and girls of high school age with a keeping fit message, and while we fell short of the goal, certainly much good was done, and the activities of the Bureau accentuated. We expect to do much better the coming year.

I am sorry to say that when the Bureau was established the "Red Light" district still flourished in a few of our larger cities. Investigations by the United States Public Health Service and other organizations has proven that an average of 80% of all prostitutes are infected. Indeed the prostitue is the connecting link in the vicious circle of the spread of venereal disease.

To control venereal disease it is, therefore, necessary to control prostitution, and so we found ourselves face to face with a moral problem as well as one of public health protection. We found most of our towns and cities ready to co-operate with us, but in some of them the old time arguments in favor of segregation were met with. We have no time now to go into a discussion of these arguments

but it was found that those who want a red light district in any city is usually confined to the following:

1. The feeble minded prostitute and some others.

2. The madams and pimps who fatten off the prostitutes.

3. Some politicians who fatten off the prostitutes.

4. The landlord who gets $100 a month for a $25 shack.

5. The doctor who sell certificates of inspection and gives prostitutes 606 at $50 a shot.

6. Officials who pimp on behalf of the city by selling bawdy house license or collecting monthly $5 and declare the "district" a necessary evil.

In short it is defended only by those who are making money out of it and they actually fool a few honest people.

The director realizes that without the co-operation of the great public, the one and one-half million inhabitants of West Virginia, the success of the work would not be possible.

Approximately one-half million dollars ($500,000.00) is spent annually in this state for the care of the insane and feeble minded. This is an enormous sum in dollars and cents, to say nothing of the loss in manpower to the country by having such a large number of insane and feeble minded patients in the three or four institutions provided for their care.

Of the one thousand or more inmates of our eleemosynary institutions, a conservative estimate is that one-half of such numbers are sent to these institutions as a direct result of venereal disease. This is an acknowledged fact based upon the statistics of the insane and feeble minded in other states where closer examinations has been made by alienists and scientists and by physicians who have given this subject deep study.

The loss to the public in manpower and danger of inoculation and infection from afflicted persons, and the loss to society, is almost too great to compute. In every instance the public pays. And it is not a question of pay—we do that anyway. It is a question of what we pay for. Shall it be for prisons and reformatories for the insane, destitute and diseased? Or shall we pay for directed treatment and care for the control and prevention of mental and physical defects, hundreds and thousands of whom are mentally and physically defective as a result of contracted or hereditary venereal disease?

Venereal disease can be prevented.

Public opinion and public co-operation promotes public health.

Good health is purchasable.

Disease is preventable.

In conclusion, I want to briefly refer to three important subjects, to-wit:

1. The State Legislature in its work of making appropriations for the support and maintenance of various activities coming under the state government.

2. Health and the small sum appropriated for the maintenance of good health among the human family.

3. Education and the large sum appropriated therefor.

I hope I will not be accused of failure to realize the importance of education, for I am strong for education and the cultivation of higher ideals and broader knowledge along every line and department of this work. I realize the great

value of education and will agree that education is something much to be desired and very necessary for enjoyment and success in life, but will not concede that it is the most desired or most necessary.

No normal or sane person would prefer education to health. It is pretty generally agreed that there is nothing worse in life than ill health, and nothing to be desired more than good health, while the uneducated may be fairly prosperous and successful.

Educational work is carried on in beautiful and stately buildings, surrounded by shade trees and ornate lawns State health work is crowded into basements and "cubby holes" of office buildings and often cramped for the price of a postage stamp.

Our last legislature appropriated approximately one and a quarter million dollars for the educational institutions of the state and the puny sum of forty thousand dollars for the purpose of protecting the health of one and one-half million persons. This is a comparison of the relative amounts appropriated for health and for education.

It long has been a moted question as to which is the most desirable in life, health or education. We have wondered many times why it is millions are spent by the states and municipalities for education and only hundreds, or at the most thousands of dollars are spent for health. A request for a million dollar appropriation for a new school is granted with a smile; a request for a few thousand to promote and maintain health would be frowned upon.

More money is appropriated annually by the West Virginia legislature to stamp out disease among hogs, horses, cattle and sheep, than for the protection of human life and health of the human family.

I am strong for education; let this be thoroughly understood as we have before stated; it is almost necessary to success in life. Public sentiment has been so shaped by educators that any public official opposing appropriations for educational purposes is considered a "back number" in the march of progress, while one who votes money for health work is often accused of extravagance.

Here is where the venereal disease problem enters.

During the past year investigations of this Bureau disclosed the fact that in one small high school five boys were infected with gonorrhea, in another school eight girls under twelve years of age had the same disease. In another section in a county school nearly all pupils had a venereal disease, having contracted it from each other, and in at least two schools, teachers who were in an infectious stage of syphilis were teaching.

Does this not call for the watchful care and expenditure of such sums of money as may become necessary for the bringing under control and stamping out the venereal disease?

Loss of time? Why every school in the country could well devote one entire day each week in health work and not lose, but gain time.

You gain a few minutes in school work on a certain day by refusing to send a pupil to a doctor or nurse, but these few minutes saved will probably mean a year lost in after life.

Education? We certainly believe in it; but we do not believe in making a "Golden Calf" out of it, and worshiping

it to the exclusion of health. We are willing to have education to be the elder brother and entitled to the birth right, but we do not want health treated like a step child.

I trust I will not be misunderstood in these few words of comparison "Health vs. Education," and what the duties of each member of the State Legislature should be in dealing with, and making appropriations for health work and for educational institutions. It is not that education is any the less important, but that health conservation is the more.

The comparison:

Nearly one dollar per capita appropriated for education.

Three cents per capita appropriated for health.

Announcements and Communications

October 8th, 1920.

To the Editor of The West Virginia Medical Journal,
Huntington, W. Va.

Dear Sir:

I have just finished reading Dr. Hodge's article in the October issue of the West Virginia Medical Journal, which was entitled "Serology of Syphilis in Relation to its Pathology," in which he states (on page 132, at the end of "Findings in the Secondary Stage"), that alcoholic drinks taken before the withdrawing of blood for a Wassermann, might convert a positive one into a negative.

I have just received a reply from the editor of The Journal of the American Medical Association bearing upon this question.

The questions asked and their answers from the editor will be found in "Queries and Minor Notes," in the October 2nd issue of the Journal of the American Medical Association, and it is there stated that a negative Wassermann may become a positive when the test is made from a patient under the influence of alcohol.

While this subject is not now of such moment as formerly, occasionally a patient is found submitting himself for a blood test while under the influence of alcohol; and as it is a question which seems to be far from settled in the minds of physicians, possibly someone can put us in the right and explain away our difficulties.

Very truly yours,

O. S. HARE,
Bluefield, W. Va.

CLUBS AND CONSCIENCES

Did you ever belong to a fraternity,
or a club,
When you were in college,
And get behind your dues?
You know how inconsiderate,
The other fellows could be,
At such times,
They wrote you letters,
That said a lot about duty,
And honor,
Insulting letters,
That you would have made them eat,
If your dues were paid,
And they posted your name,
In unnecessarily large type,
On the bulletin board,

And every time you crept past that board,
You blushed,
And looked conscious,
Just as you did later,
When you were being married,
And the minister asked anyone who knew anything about your past,
To step forward and testify,
Or forever after hold their peace,
And you wondered if they would.
Well,
The point of this is,
That your Red Cross dues are due,
November 11 to 25.
If you don't pay them,
You won't be posted anywhere,
Except in your own conscience.
But even if you don't interview your conscience,
Very often,
You don't want to feel,
That you can't even open the door,
Where you keep it,
Without having the question of that dollar brought up,
That you ought to have given the Red Cross.
Better join.

"ALCOHOL, ARSPHENAMIN AND THE WASSERMANN TEST"

To the Editor: — In Queries and Minor Notes (The Journal, Oct. 2, 1920, p. 956) the statement is made that there is no evidence of a positive Wassermann test becoming negative under the influence of alcohol. C. F. Craig (The Wassermann Test, St. Louis, C. V. Mosby, 1918, p. 42) gives a table of nine instances in which he was able to obtain negative Wassermann tests by the administration of alcoholic beverages on persons previously giving positive Wassermann tests, and thus sums up:

From these experiments, which have been confirmed by many investigators since our original publication, it is evident that alcohol may render inert the substance or substances in the blood serum of syphilitics which react with lipoids in the antigenic extracts, and thus a strongly positive serum may give a negative result. For this to occur, the alcohol must be taken in considerable quantity and probably within twenty-four hours, or at most three days before the test is made, but it should be remembered that smaller amounts of alcohol may render weak reactions negative, so that cases which should present a single plus reaction will often react negatively after even moderate amounts of alcoholic liquors have been ingested.

THOMAS G. HULL,
Springfield, Ill.

Chief of Diagnostic Laboratory, State Department of Public Health.

Outline of the preliminary program Southern Medical Association, Fourteenth Annual Meeting, Louisville, Kentucky, November 15-18, 1920:

Monday forenoon and afternoon, November 15:

Southern States Association of Railway Surgeons.
Section on Urology.
Section on Orthopedic Surgery.
Section on Roentgenology.
Section on Obstetrics.
Conference on Medical Education.
Southern Hospital Association.
Southern Gastro-Enterological Association.

National Malaria Committee (Conference on Malaria).

Association of American Medical Milk Commissions.

Dinner (evening) to Presidents and Secretaries of State Medical Associations, and to State Health Officers.

Tuesday, Nov. 16:

General Opening Session — Addresses of Welcome, President's Address, Orations on Medicine, Surgery and Public Health, etc.

Tuesday afternoon, Wednesday forenoon and afternoon, and Thursday forenoon, Nov. 16-18:

Section on Medicine.
Section on Pediatrics.
Section on Public Health.
Section on Surgery.
Section on Eye, Ear, Nose and Throat.

Thursday afternoon, Nov. 18:

Last General Session (short) followed by the Symposium on Nephritis, participated in by all the sections.

Tuesday afternoon, Nov. 16:

Musical and Tea for Visiting Ladies.

Tuesday evening, Nov. 16:

Reception and Dance in honor of the President and Visiting Members of the Southern Medical Association.

Wednesday, Nov. 17:

Automobile Ride and Luncheon at Louisville Country Club for Visiting Ladies.

Wednesday evening, Nov. 17:

Alumni Reunion Dinners.

Monday, Tuesday, Wednesday and Thursday:

Scientific Exhibits — the outstanding feature of this meeting.

Tuesday, Wednesday, Thursday:

Moving picture demonstrations in connection with Scientific Exhibits.

Charleston, October 8, 1920.

To the Citizens of West Virginia:

The State Department of Health has received the following letter from the Surgeon General of the United States Public Health Service:

"The Bureau has made every effort possible under existing laws and regulations to prevent the occurrence of anthrax due to infected shaving brushes. In spite of its efforts anthrax cases occur and will continue to occur unless the public cease to buy and use horse-hair brushes for shaving.

"It is the concensus of expert opinion that shaving brush anthrax is only contracted when the shaving brush is made of horse-hair and congress at the next session will be asked to prohibit the use of horse-hair in shaving brushes. In regard to the horse-hair shaving brushes which are now in trade channels, and some of which are presumably infected, it is doubtful if any effective measure can be taken by health officials except a direct appeal to the public not to buy or use horse-hair brushes.

"You are strongly urged to issue in your state such an appeal, giving it the widest publicity, as the only remedy to obviate the potential danger from these brushes pending additional legislation."

The State Department of Health heartily endorses the above warning and urges the public to refrain from the use of these brushes.

R. T. DAVIS,
State Health Commissioner.

The West Virginia Medical Journal

JAS. R. BLOSS, M. D., Editor
C. R. ENSLOW, M. D.
J. E. RADER, M. D. Assistant Editors

Huntington, W. Va., November, 1920.

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All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: 804 Lincoln Place, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

OFFICERS OF THE STATE ASSOCIATION

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DELEGATES TO A. M. A. FOR 1920-1921—H. P. Linz, Wheeling. Alternate, J. E. Cannaday, Charleston.

COUNCIL

FIRST DISTRICT—H. P. Linz, Wheeling, one-year term; C. G. Morgan, Moundsville, two-year term.

SECOND DISTRICT—C. H. Maxwell, Morgantown, one-year term; J. C. Irons, Dartmoor, two-year term.

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SIXTH DISTRICT—Charles O'Grady, Charleston, one-year term; R. H. Dunn, Charleston, two-year term.

WHAT CAN BE DONE?

It is essential that certain laws, which experience shows are necessary, shall be enacted from time to time for the government of the body politic. This will be readily admitted by all.

That laws to control and regulate the practice of the healing art, our profession should be made for the protection of our fellowmen from the charlatanry of ignorant or unprincipled persons will be just as readily admitted. None of our citizenry will so promptly agree to this as will honest physicians.

But if laws are to be helpful; if they are to truly accomplish good, then it is essential that they shall be enforced. If not then they become not a help but really an impediment to progress.

West Virginia has a medical practice act. It is very clearly defined in it what shall constitute the practice of medicine and what shall be the requirements for licensure so to do. Thus far it is fine.

BUT—what good does this law do when it cannot be enforced? Before the last session of the state legislature some wrath was called down upon my head

by an editorial in which I pleaded for some additions to our law which would put "teeth" in it that it might be enforced. I was told it had teeth. Possibly so. In the two years since then no mastication has been accomplished that has come under our personal observation.

The chiropractors flourish as green bay trees and their numbers increase in our midst mightily. A health healer is able to establish a $100,000 cure all, if we are to believe the current lay papers.

Recently the following poster has been sent to us by one of the state's physicians. Of necessity the size of the advertisement has had to be reduced. We have retained the headings as they appear and the wording verbatim, together with the form and make-up:

WHY DO YOU SUFFER?

With Aches and Pains
Such As
Lameness, Lumbago, Nervous Diseases,
Kidney Complaint, Vertigo, Rheumatism, Neuralgia, Headache,
Bruises and Sprains

TREATED BY THE BARE HAND

Satisfaction Guaranteed
C. TUTTLE
Keystone, W. Virginia
C. P. North's Residence in Burke

What we should like to know is why cannot some provision for enforcing our medical laws be made? Why did you and I have to work and study as we did and then take rigid examinations that the people of the state might be assured that we were safe to entrust themselves to and then have these charlatans go about with impunity?

WHERE ARE THOSE TEETH?

GET BEHIND THE RED CROSS

Enlisting the aid of an entire nation in a huge public health campaign is not as easy a matter as bringing a nation into line behind a war relief agency, simply because the circumstances surrounding the casualties and suffering of war are far more dramatic than those that accompany the ravages of preventable disease and poor sanitation. Nevertheless, the American Red Cross last year, at the beginning of its peace time campaign succeeded in signing up ten million members. This year, with a peace record in its way as fine as its war record behind it, it hopes to get even a larger measure of popular support. The annual roll call is set for the two weeks from the 11th to the 25th of November. There are in this country ninety million people who did not join last year. It is these ninety million that the Red Cross wants.

It is not easy to interest a healthy man in health. The people who are preoccupied with health are usually the people who haven't got it. Physicians and nurses, however, are an exception to this, since the health of others makes the success of their professions. And, therefore, it is the physicians and nurses who, realizing the need for public health work and the measure in which the Red Cross can fill that need, can by spreading the Red Cross message, do more than any other class of people to make the membership drive a success. They can join themselves and they can persuade others to join. It is the duty and the privilege of every one connected with either the medical or the nursing profession to give the Red Cross his or her aid.

HOW YOU CAN HELP

There is a lurking suspicion that one reason physicians have not secured the various enactments truly essential in the government of health matters, has been due to a lack of interest. Possibly it is not a lack of interest so much as a lack of effort. No class of persons in the commonwealth can exert the influence in a quiet and unostentatious way that our men can if they are but united.

A vital statistics law is one of the very essential pieces of legislation which will come up at Charleston in February. Certainly none of us but will admit the necessity for it. The B. R. T. Society has a resolution in the minutes of its last meeting, a report of which appears in this issue, which I would urge you to read:

Now the question arises, what can we do about it? No right-minded citizen wants this great state to be the laughing stock of America. We have been at the tail-end of the procession long enough. Let us advance and prove to the world that we are as intelligent and patriotic as our sister states Ohio, Pennsylvania, Maryland, Virginia and Kentucky.

The State Department of Health will present to the State Legislature at the coming session, for consideration and enactment into law, what is known as the "Model Vital Statistics Law." It is a law which has been adopted in some form or other in forty-three (43) states of the Union and has given such satisfactory results in thirty-three (33) of these states that they are able to obtain a registration of over ninety per cent (90%) of all deaths. These states have been designated by the Census Bureau at Washington, D. C., as the Death Registration Area. If this law is good for thirty-three (33) states, and will produce results there, it is good for West Virginia. We want you to see your Senator or Delegate and let him know that you are interested in obtaining better registration laws. Tell him you want him to vote for the model law. If you can't visit with your representative, call him up by phone, write him a letter, and have your friends do the same. It makes no difference whether you are a man or a woman, Republican or Democrat, Prohibitionist or Anti-Prohibitionist, you certainly are for better health and better health laws. We are not asking for more money. There will be no increased taxation as a result of this law. It simply places the birth and death registration of the state in the hands of the health department, rather than with the county clerks and assessors. Go and ask these gentlemen what they think about the present system. Ask them if they do not honestly believe a better system could be put to work. We know it can. We want your help and the way you can help is by influencing your representative to carefully investigate this proposed law and then use his best judgment in voting on it. We can rely on results following an honest examination of the facts. Will you do this? It will help impress him with the fact that you are interested.

Do it today. Don't wait—do it now.

STATE NEWS

It will be noticed that this department is somewhat abbreviated again this month. This is probably due to the fact that a few men who are very kind about sending us news notes have been out of the state.

Letters and cards were sent to quite a number of the members in various parts of the state beseeching them to tell

us what was going on in their neighborhoods. The replies have run about seven per cent.

The County Society reports are from the usual ones who send them without having to be requested. If the editor only knew who the secretaries of the component societies are letters would be sent them.

Is it not possible for someone to secure these reports from each society? We would like to have the report promptly, too, not when it is from six to twelve months old, though that is better than none at all.

This department of your Journal has been criticised. Please be honest and fair enough to place the blame where it belongs.

The following is extracted from some remarks by Dr. Arthur Dean Bevan at a conference on Medical Education:—"A few weeks ago a man came into my office and said he had been to a great clinic where they practice group medicine in the best possible way. He was an intelligent man. He had been put through a machine. He said: 'Doctor, I went there, and I was most carefully examined for a week. They X-rayed my teeth; they X-rayed my chest, my stomach and my intestines. They made an examination of my blood; they took what they call a Wassermann test; they made an examination of my feces and of my urine. They made an exhaustive and thorough examination, and when they got through they said: 'Well, Mr. So and So, we cannot find anything wrong with you. You go back home; you are run down; you need to eat more and not work quite so hard.' This man was excited; he pulled out his handkerchief and with a trembling hand wiped the perspiration from his forehead, and remarked: 'Doctor, I have lost fifty pounds, and I am so sick that I cannot do my work.' This man had been through a machine and did not have the benefit of the personal element in medicine. He had a marked exophthalmic goiter without any visable goiter. The diagnosis was made in an instant by a clinician who had personal control of the situation, the minute the man took his handkerchief out of his pocket and wiped his forehead, and said he had lost fifty pounds and could not do his work, the diagnosis was clear. It is in personal element that the art of medicine comes and is something we cannot get away from. Again medicine as a profession in this country is a means whereby about 150,000 men earn a livelihood. Our problem is not a simple one, but I think will be worked out."—Jour. Kans. Med. Socy.

The above has seemed to us to contain much food for thought and sufficiently so to warrant its republication in our editorial columns.

State News

Dr. C. L. Parks, who was located at Salem, has removed to Fairmont, where he will practice his profession.

Dr. Arnold A. Scherr has changed his location from Eglon to Keyser, having relocated at the latter place in September.

Dr. J. Howard Anderson, secretary and president-elect of the State Association, was a recent visitor in Huntington.

Dr. C. L. Holland, of Fairmont, spent a month at Boston attending the Chil-

dren's Clinic at Harvard. Dr. Holland makes a trip each year to some of the eastern clinics.

Dr. C. M. Hawes, of Huntington, spent two weeks in New York in October doing special work in Bronchoscopy.

Married on September 15 Dr. Emmet Dewill Moyers, of Cairo, W. Va., and Miss Mildred R. Bentley, of Elmira, N. Y.

Dr. and Mrs. Joe Lyons, of Marlinton, were visitors in Huntington in October.

The engagement of Dr. Staats, of Wheeling, to Miss Josephine Fast, of Morgantown, has been announced. Dr. Staats is connected with the Ohio Valley General Hospital at Wheeling.

Dr. E. W. Crooks, of Parkersburg, attended the reunion at Columbus, Ohio, from the 13th to 16th of October.

Dr. S. D. H. Wise, of Parkersburg, spent a week recently in Columbus, Ohio, on professional business.

Dr. H. D. Hatfield, of Huntington, who recently was operated on for appendicitis, spent ten days at Atlantic City recuperating.

Dr. William F. Beckner, of Baltimore, is now connected with Dr. T. W. Moore, eye, ear, nose and throat specialist, of Huntington. Dr. E. D. Wells, who was formerly associated with Dr. Moore, has taken offices alone.

The following physicians from West Virginia attended the annual meeting of the American College of Surgeons held at Montreal, Canada, in October: J. E. Cannaday, B. H. Swint, P. A. Haley, W. A. McMillan, Campbell, T. K. Oates, C. H. Hoffman, W. W. Golden, C. R. Ogden, G. C. Schoolfield, and Walker.

Dr. C. G. Willis, of Huntington, who has been doing general practice, has associated himself with Dr. R. J. Wilkinson, confining his work to general surgery.

Dr. Andre Crotti, of Columbus, Ohio, delivered an address before the Cabell County Medical Society, at Huntington, October 14th, on the subject of "The Early Diagnosis and Treatment of Cancer."

The All-American Conference on Venereal Diseases will hold a meeting in Washington, D. C., December 6-11, 1920. A most interesting program has been announced.

The Southern Medical Association will hold its annual meeting at Louisville, Ky., November 15 to 18. All who expect to attend are urged to secure accommodations at once.

Dr. Humbolt Yokum died at his home in Beverly, Randolph county, September 29, 1920, age 60 years 6 months and 12 days. Dr. Yokum had been suffering for sometime from cancer of the colon, but the immediate cause of his death was paralysis which developed about twelve hours before his death. He was active in Democratic politics, prominent in business, being president of the Beverly National Bank and quite successful in practice.

The friends of Dr. M. M. Hoff, of Philippi, regret to learn of the serious

illness of his wife, who has for sometime been paralyzed and that the care and anxiety resulting from Mrs. Hoff's illness has greatly impaired Dr. Hoff's health.

Dr. Frank LeMoyne Hupp, of Wheeling, chairman of the West Virginia Committee of the American Society for the Control of Cancer, attended the First Annual Session of the Pennsylvania Section of Clinical Congress of the American College of Surgeons, held at Pittsburg, October 7-8-9. At this meeting Dr. Hupp delivered a public address on "The Prevention of Cancer Mortality."

DOCTOR FORMERLY OF FAIRMONT DIES IN COBLENZ

Coblenz, Oct. 6.—Dr. James Wilson McDonald, a Young Men's Christian Association surgeon and formerly superintendent of the state hospital at Fairmont, W. Va., died today in the military hospital of blood poisoning.—Wheeling Register.

DOCTOR SPEEDING WITH PATIENT TO HOSPITAL IS SHOT BY POLICE

Clarksburg, W. Va., Oct. 6.—J. E. Boggs and John Darnell, members of the state constabulary, and John Sires, a detective of this city, were arrested and held for trial today under a charge of feloniously shooting Dr. C. C. Coffindaffer through the shoulder as he was speeding in an auto with a patient from Gypsy to Clarksburg hospital last night.

The physician is in a critical condition but will recover. The officers had been looking for moonshiners who had been transporting liquor that way and the driver of the car failed to stop when they asked him to do so. Occupants of the car say they thought they were being held up by robbers.—Wheeling Register.

NURSES FOR NEUROPSYCHIATRIC HOSPITALS

A special course for the instruction and training of nurses in the care of mental and nervous cases has been established at General Hospital No. 49, Gray's Ferry Road, near Philadelphia, by the U. S. Public Health Service. There is an immediate need for 150 nurses for soldier patients with mental and nervous disorders, which class of patients constitutes about 38 per cent of ex-soldiers under the care of the Public Health Service.

The Kessler-Hatfield and New Huntington General Hospitals, of Huntington, have recently effected a merger. The details have not as yet been made public, but it is understood that the staff of the two institutions will be united.

Dr. S. C. Austin, of Charleston, spent several days at Columbus, Ohio, recently.

Dr. and Mrs. Barksdale have returned from their wedding tour and are now at home to their friends in Charleston.

Friends of Major L. C. Covington, M. C., are pleased to know that he is located at the Army Hospital, West Point, specializing in eyes, ears, nose and throat.

Society Proceedings

Dartmoor, W. Va., Oct. 11, 1920.

Editor Journal:

The Barbour-Randolph-Tucker County Medical Society met at Elkins, in Y. M. C. A. building, October 8, 1 p. m.,

Drs. Butt, Perry, Talbott, Wilson, Moore, Irons, (Drs. Owens and Fredlock coming later), being present.

In absence of president and vice presidents, Dr. Talbott presided.

Minutes of previous meeting read and approved.

Secretary read necrological report on Dr. Isaac Smith, which was approved, and a copy directed to be sent to the wife, and a record made in minutes.

The secretary was directed to procure Dr. Golden's eulogy on Dr. Yokum, decease, for next meeting.

The rule heretofore observed of electing the president from the different counties, in rotation, was abolished and the rule of the State Medical Society adopted as to the election of president and secretary, neither of which are to be elected unless present.

The following officers were elected for the year 1921: President, Dr. O. L. Perry; vice presidents, Drs. J. L. Miller and T. M. Wilson; secretary-treasurer, Dr. J. C. Irons; censor for Tucker county, Dr. J. L. Miller.

The rule of electing both delegates to the State Society at the same time, and for two years, was changed, and one elected for two years and one for one year, so as to elect one each year hereafter. Dr. J. L. Miller was elected for two years and Dr. O. L. Perry for one year.

Dr. Perry then read a very interesting paper on "The Experiences of the Country Doctor," which was discussed by different members, and some ancient remedies commonly in use many years ago for cure of diseases, were related by Mr. John Tyree, a visitor. One was the treatment of epilepsy—"three live bed bugs three times a day."

The resolution on "Vital Statistics" was passed, which follows.

Secretary directed to write Dr. Hoff a letter expressive of the sympathy of the Society on account of the serious illness of his wife and his own sickness.

Drs. Wilson and Irons were appointed a committee to invite Drs. John W. Bosworth, of Philippi, and John Huff, of Parson, to attend our next meeting as the guests of the Society, they being the oldest living physicians in our territory.

The Society adjourned, to meet in Elkins, in January, 1921.

J. C. IRONS,
Secretary.

—

Resolution passed by B.-R.-T. Medical Society October 8, 1921:

Whereas, the public attention is called to the fact that all the states of the Union have health and statistics laws, approved by the National Health Bureau, except five, of which West Virginia is one, and

Whereas, approved vital statistics are necessary for the individual, the state, and the national interests,

Therefore, Be it resolved, That this Society, through its members in each of the counties of Barbour, Randolph and Tucker use every proper means to secure from the representatives of said counties in our state senate and house of delegates, their support of a proper and efficient Vital Statistics Law, and that this Society solicit the co-operation of all coordinate County Medical Societies, in securing the support of such a measure from every legislator in the state.

But, be it further provided, that physicians shall not be required to furnish data and make such reports, without some compensation, and that for neglect

they shall be subject only for fine, and not imprisonment, unless in proven cases of wilful and repeated neglect.

—

Dr. Isaac Smith, born in Harrisonburg, Virginia, September 8, 1853. Educated in the public schools and at Huttonsville, W. Va. Academy. Entered Louisville Medical College and graduating from same he located at Peel Tree, Barbour county, where he practiced his profession for forty-four years, dying in harness January 15, 1920, after four hours illness.

On July 16, 1877, Dr. Smith was married to Lucy M. Keyser. Two daughters were born to them, now Mrs. Lee Maxwell and Mrs. Creed Ward.

Dr. Smith had a very extensive country practice and was regarded as one of our best physicians. He did quite an unusual amount of surgery as well. It was said of him, "No night was ever too cold for him to answer the calls of the sick and suffering." He was jovial and enjoyed the companionship of his friends as they did his. Owing to his isolation, he seldom met with our medical society.

This Society extends sympathy to his wife, daughters and friends in this sad loss of husband, father, physician and friend.—Read and approved byB.-R.-T. Med. Socy., October 8, 1920.

The opening meeting of the fall session of the Cabell County Medical Society was held at the Frederick hotel at 8:30 p. m., October 14, 1920.

Dr. Andre Crotti, of Columbus, Ohio, was the speaker of the evening. Dr. Crotti delivered a very interesting lecture on "Cancer," illustrated by carefully prepared lantern slides. The public was invited to attend this meeting, and the interest which it has in this subject is shown by the large number present. This program is a part of the statewide effort to educate the public to the importance of the early recognition and treatment of cancer, points which were especially emphasized by Dr. Crotto.

In conclusion, a rising vote of thanks was given to the speaker.

F. C. HODGES,
Secretary.

Parkersburg, W. Va., Oct. 12, 1920.

Dear Editor:

The Little Kanawha and Ohio Valley Medical Society met in regular session at the Y. M. C. A. on the evening of October 7, 1920, with the president, Dr. S. D. H. Wise, presiding. The minutes of the previous meeting were read and approved.

A letter was read by the secretary from Dr. Andre Crotti, of Columbus, accepting our invitation to read a paper before our Society. The secretary was instructed to write Dr. Crotti and have him give us a paper during the month of December or January.

Dr. C. L. Muhleman submitted his final statement on the finances regarding the state meeting which was held here in May, and showed a balance of $73.81. A vote of thanks was given Dr. Muhleman by the Society for his efforts in raising the money which made the state meeting the success that it was. The balance was turned over to the secretary to be disposed of at the will of the Society for an oyster feed at some future time. The members of the Society were asked to see the men that are candidates for the legislature and ascertain their views in regards to measures that might be of benefit to the profession and support these men regardless of politics at the

coming election. The meeting was then adjourned to meet again at the call of the president.

W. B. RICHARDSON,
Secretary.

The Mercer County Medical Society met on September 23, at the Bluefield Country Club and had as its guests the Tazewell County and McDowell County Medical Societies.

The meeting was called to order by President St. Clair and the minutes of the last meeting read and adopted.

There being no clinical cases the papers were read in the following order: "Treatment of Diabetes," by Dr. A. H. Hoge, of Bluefield. This was a splendid paper and brought out a great many interesting points and was discussed by the following: Drs. Pierce, Hare and Rogers, and was closed by Dr. Hoge.

The next paper was by Dr. V. L. Weatherby, of Welch, on "Tuberculosis in Children." This also was an interesting paper and brought out many valuable points. It was discussed by the following: Drs. Hare, Hoge, W. H. and C. T. St. Clair and closed by Dr. Weatherby.

The next paper was by Dr. I. Pierce, of Tazewell, on "Drugs and Obstetrics." He reported a number of cases in which he had used pituritin and with what results. This was very interesting and was discussed by the following: Drs. Johnson, Pyott, Thompson, Hoge, Horton and Fox, and closed by Dr. Pierce.

There being no further papers, the Society proceeded to business. Dr. W. H. St. Clair brought to attention of the Society the need of the Bluefield physicians giving their services to a free clinic. A motion was made by Dr. Hoge and seconded by Dr. Slusher to have this matter laid over until our next meeting, at which time it will be discussed.

There being no further business the Society adjourned to the dining room, where a delicious banquet had been prepared for them, which was enjoyed by everyone present. Then they adjourned to meet with the McDowell Society the latter part of October or first of November.

E. H. THOMPSON,
Secretary.

RESOLUTION

Whereas, the Divine Creator, in His inscrutable wisdom, has seen fit to remove from the scene of his earthly labors, our esteemed friend and professional brother, Doctor J. E. Cox, of Riley, Raleigh County, West Virginia; and

Whereas, during the years of his residence in said county, the deceased, by his skill and ability, his universal kindness and ethical practice, as well as an ever ready response to the call of sick and suffering humanity, has richly earned and commanded the respect and esteem of his fellow practitioners and of the public; and

Whereas, it is deemed proper and fitting that a memorial attesting the sorrow felt and loss sustained in his demise by the profession in particular and the community in general, be recorded in the minutes of this Association; now, therefore

Be It Resolved, That the Raleigh County Medical Association hereby expresses and acknowledges its deep and abiding sorrow in the death of its former member, the late Doctor J. E. Cox, and the permanent loss to the medical profession of one of its most able, faithful and skillful practitioners; that a copy of this resolution be spread at large

upon the records of this Association; that copies hereof be furnished by the secretary of said body to the several newspapers of Raleigh county, West Virginia, for publication, as well as to the West Virginia Medical Journal for like purpose; and that a further copy, duly attested by the president and secretary, be forwarded by registered mail, to the brother and sole surviving member of the family of the deceased.

ROBERT WRISTON,
J. A. CAMPBELL,
E. S. DUPUY,
Committee.

Medicine

TREATMENT OF BREAST FISSURES

A. Olivier (*Journal de medecine de Paris,* December, 1919) recommends particularly orthoform, methylene blue, and horse serum. Orthoform may be used as a powder, blown over the fissure or dusted on sterile gauze which is then applied over the breast and bandaged on. A saturated solution of orthoform in eighty per cent alcohol, of which four drops are applied fifteen minutes before alternate feedings, has also been recommended, but the alcohol causes some pain and a better preparation is a liniment consisting of orthoform, five grams; oil of sweet almonds, ten grams, and ether, 9.5 grams. Dresch uses a three per cent solution of methylene blue as a prophylactic against and for the treatment of fissures. The child's mouth and central portions of the breasts are first washed with a tepid two per cent solution of sodium bicarbonate. The methylene blue solution is then painted over the nipples immediately after feedings. The child feeds as usual, without any difficulty. Its mouth becomes bluish, but not enough of the drug passes into the urine to stain the linen. The drug not only acts as a local anesthetic but also favors healing of the fissure; eight or ten days' application of it is sufficient. Horse serum acts both indirectly as an antiseptic, attracting many leucocytes to deal with the germs, their toxins, and the poisonous products of tissue degeneration; as a promoter of healing, and as an analgesic. In a recently delivered woman in whom fissures of both nipples threatened wholly to prevent nursing of the new born infant, and after failure of the ordinary measures, the author applied two small aseptic compresses with the serum preparation known as hemostyl over the nipples and areolae, and renewed them three times a day. After one day's treatment, one of the breasts could be used for nursing, and after three days, the other. The grayish fissures took on a more healthy, red aspect, rapidly became smaller, and were no longer painful. In seven other cases, favorable results were likewise obtained. The dressing should be applied after each act of nursing; the areola should previously be well washed with boiled water, and the dressing covered with some impervious material, to prevent drying and caking of the serum. Serum should be used prophylactically whenever the breast becomes a little sensitive. Washing the nipples with antiseptic soap, followed by neutral glycerin and boiled water, two or three times weekly during the last two months of pregnancy, helps to prevent fissures; alcoholic preparations should not be applied, tending rather to favor fissure formation.

CURE OF HOOKWORN INFECTION

This paper is based on 231 cases, all of which were observed twenty-nine days

or over (up to 228 days in one instance), and no case is reported as a cure that did not show an average of from ten to fifteen consecutive negative stools during a period of four weeks after treatment. The five-stool method of examination was resorted to in each instance. The usual mouth treatment was not very encouraging in its results. Much more efficient results can be obtained by the method of intra-inestinal tube treatment, owing to the fact that the full, concentrated dose of vermifuge is delivered precisely at the point of infection. Instead of 34 per cent of cures, as in the case of a first mouth treatment, fully 80 per cent are cured by a first tube treatment. Only one repetition is necessary for the relief of the great majority of infections.

THE WINNIPEG EPIDEMIC OF ENCEPHALITIS LETHARGICA

William Boyd (*Canadian Medical Association Journal,* February, 1920) discusses at some length the spmptoms of this disease and the current hypotheses concerning its nature. The Winnipeg epidemic of sixty cases with twenty-three deaths corresponded closely with previous epidemics which have been described. The mortality of thirty-eight per cent was unduly high. The characteristic case, presenting fever, drowsiness, strabismus, ptosis, diplopia, tinnitus, some degree of facial weakness, constipation, and perhaps some urinary and spinal fluid changes, is readily recognized. The fleeting nature of the disturbances is typical. Sensory disturbances were present in a number of cases. Some of the cases were atypical, suggesting tumor, apoplexy, and other brain lesions. The brain was examined in eighteen cases, and showed marked congestion, perivascular infiltration with lymphocytes and plasma cells, and occasionally hemorrhages. Degeneration of the nerve cells was variable. The changes were most marked in the midbrain. Marked lesions were also found in the kidneys. The writer calls attention to the fact that a remarkable epidemic of hiccough occurred in the city at the same time as the outbread o f encephalitis.

CORPUS LUTEUM EXTRACT IN VOMITING OF PREGNANCY, WITH REPORT OF CASES

James Knight Quigley (American Journal of Obstetrics.): Presents the summary of cases treated by this method:

Number of cases treated, 17.

Number of cases benefited permanently, 12.

Number of cases benefited but relapsing, 4 (not enough given).

Number of cases of complete failure, 1.

One case of pruritus, no relief.

Average number of doses, 7; had the four relapsing cases been given more at the onset as a routine there would probably have been more cases permanently benefited.

Preparation used, a 1-cc. ampoule containing 0.2 gm. desiccated substance of the gland.

Hoffmann reports the finding of the living Treponema pallidum in the urinary sediment in one of his cases, and refers to a similar observation by Dryer and Toepel. A similar report by Vorpahl is not convincing. These are important observations, but so far they lack confirmation by other investigators.

SYPHILITIC AORTITIS

Babcock (*The American Journal of Syphilis*) would emphasize the importance of active antisyphilitic treatment

in all cases of syphilitic aortitis. Mercurial treatment with or without salvarsan should be employed for the rest of the patient's life. The author has found beneficial effects of rubs and injections in many of the cases treated by him. He has not seen good effects from mercury and iodides by the mouth.

THE USE OF THE PHRASE "WASSERMANN REACTION"

Kolmer (*American Journal of Syphilis*) objects to the phrase "Wassermann Reaction" as a designation of the complement fixation test in syphilis for the reason that the reaction in this disease is based upon principles discovered by Bordet. The reaction should not be designated "Bordet-Gengou" because Wassermann, Neisser and Bruck were the first to utilize the phenomenon in the serological diagnosis of syphilis. Detre deserves more consideration than he has received, since he published his results only ten days after Wassermann and his colleagues.

Wassermann himself is apparently the only one who at present uses the original Wassermann technique, which is after all based upon an incorrect hypothesis in regard to the specific nature of the syphilitic antigen, and his explanation of the reaction along with his technique has long ago been abandoned.

Kolmer would also demand a more careful use of the terms "reaction" and "test," reserving the former for the results of the test, and the latter for the technique or method employed.

Surgery

EXPLORATION OF BRAIN WOUNDS

Towne and Goethals (*Annals of Surgery*, May, 1920) state that in an unselected series of twenty-eight cases in a forward hospital, brain wounds were treated with the conception that the problem involved was the absolutely complete removal of contaminated damaged brain, bloodclot, hair, cloth, bone and metal so that primary suture might result in clean healing. The method adopted was to suck and irrigate out the brain and clot, and then extract with fine forceps, bone and metallic fragments detected by a gentle palpating finger, provided the cavity was sufficiently large to admit the finger. The size of the hole in the dura was not taken as an index, but was enlarged if necessary. In some cases this finger technic was contraindicated by the small size of the track in brain substance, or by the awkward situation of wounds caused by missiles passing in by way of the deep nasal sinuses; in these instances cleaning was done as well as possible with catheter and forceps. Of the twenty-eight cases eight were considered inoperable and the patients died without intervention in a few hours; twenty patients were operated upon and of these seven died, giving a mortality of thirty-five per cent. More important than the mortality figure is a study of the cause of death in these seven cases, which show: One death from empyema with healing brain wound; three unavoidable deaths due to extensive brain injury or arterial hemorrhage; one unavoidable death due to sepsis, in which a deep cavity communicating with a nasal sinus could not be reached for

proper cleaning; one death from streptococcus ventriculitis caused by a deep lying minute metallic fragment which could probably not have been extracted even with a magnet, and one septic death from a wound involving cerebrum, lateral ventricle, and cerebellum in a case that should have been given the benefit of more extensive operation with removal of the metal through a counter opening. In short, there was no death from encephalitis when the metal and bone were within reach in a cavity large enough to admit the finger; and only two of the seven deaths could possibly have been avoided by the use of the magnet or by more extensive operative procedures.

NO SURGICAL APPENDICITIS WITHOUT ORGANIC STRICTURES

Pitzman, M. (*Ann. Surg.* 1902, lxxi, 149). The author reports his observations of 250 cases of acute, and 500 cases of chronic, appendicitis and states his theory regarding the relation of organic stricture of the appendix to surgical appendicitis.

In acute appendicitis examination shows the appendix to be distally dilated and congested to within ½ in. of the caecum and beyond that comparatively normal in appearance. After the removal of the appendix a practically impassable stricture is seen at the juncture of the normal with the dilated portion and marked differences in the mucosa of the two parts demonstrate beyond a doubt that the stricture is the cause of the condition.

In gangrenous cases it will be found usually that the gangrene also stops short of the caecum but extends into the mesentery for a variable distance depending upon the condition of the appendix. In the author's opinion the infection of the appendix is not haematogenous but due to the bacteria-laden faeces confined by the stricture to the distal end of the appendix.

The pathology of true chronic appendicitis is absolutely the same as that of the acute form except for the absence of infection, and appendicitis is the cause rather than the result of the adhesions so often found.

In cases of stricture there is a history of sharp pain, while in those without stricture pain is absent. The former are relieved by operation permanently and the latter only temporarily.

According to the author, the attack is brought on by closure of the stricture. Colicky pains follow, the appendiceal walls become involved, appendiceal peristalis ceases, and localized tenderness on pressure results.

The author's conclusions are summarized as follows:

1. Attacks of acute suppurative appendicitis are brought on by closure of a performed stricture.
2. The inflammation and eventual gangrene are caused by the bacteria in the locked-up faeces.
3. In true chronic appendicitis there is a stricture which during the intervals between attacks is patent.

THE RESECTION OF IMPASSABLE STRICTURES OF THE URETHRA, WITH A REPORT OF THREE CASES

Harris, S. H. (*Med. J. Australia,* 1920, i, 99). Harris bases his treatment of impassable stricture on the following principles: (1) "that the perineal portion of the male urethra may be slit upon its floor to any desired extent and thus converted into a "ribbon;" (2) that any

damaged portion may then be resected and the ends of the "ribbon" sewn together; and (3) that provided no urinary contamination of the wound be permitted, the urethra will resume its tubular form naturally and in due course." Thus the necessity for the long-continued use of seconds after the usual external and internal urethrotomy is avoided.

To obtain a clean field for operation as well as to take care of the impairment of renal function so often concomitant with impassable stricture, a cystotomy is first performed and drainage and irrigation of the bladder are instituted for at least a week before the perineal work is done. With the patient in the exaggerated lithotomy position, a sound is then passed to the stricture from without or through the cystotomy wound. The incision is made down to the sound, and the urethra is widely exposed and converted into a "ribbon" with the strictured area in the center. The stricture is resected, the scar tissue carefully dissected out, and the ends of the urethra approximated and sutured snugly together. No further sutures are necessary when the thighs are brought in apposition. Suprapubic drainage is discarded in ten days and in three weeks a large sound is passed.

The author reports three cases in which this operation was followed by complete recovery.

THE SURGICAL TREATMENT OF VARICOCELE

Jacob, O. (Du varicocele; son traitement chirurgical). *Rev. de chir.*, Par., 1919, lvii, 352. Anatomical and anatomopathologic study of varicocele shows that it is necessary to create a barrier to the trajectory of the spermatic veins in order to diminish the action upon them of the exaggerated pressure of the blood column. A more or less extensive resection of the group of veins is necessary but the funicular and deferential branches should be left intact. The trunk veins should be resected. Resection of the veins is not enough, however, for special treatment is necessary to correct the excessive elongation of the cord, the exaggerated descent of the testicle, and the distention of the scrotum. These corrections the author believes are best realized by fixing the testicular vein stump to the pillars of the external inguinal ring.

The technique comprises the following steps:

1. An incision similar to that for the treatment of inguinal hernia but not so long.

2. Exposure of the external opening of the inguinal canal and exposure of the spermatic cord.

3. Isolation of the varicose spermatic veins in the cord.

4. Resection of from 6 to 8 cm. of the varicose group, the deferential artery being spared.

5. Fixation of the testicular venous stump to the pillars of the inguinal ring.

6. Suture without drainage.

In 237 cases operated upon by this method since 1919 the author had no serious accident, and there has been no testicular atrophy. In some instances a sort of aseptic phlebitis developed in the testicular venous stump but all the patients have been cured and have remained cured.

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SOME POINTS IN THE PHYSICAL EXAMINATION FOR PULMONARY TUBERCULOSIS

By J. W. Moore, M. D.,
Charleston, W. Va.

Read Before the West Virginia State Medical Association, Parkersburg, May, 1920.

To say that it is possible to make a correct diagnosis of every case of Pulmonary Tuberculosis would be a mistake for there are some cases with few signs or symptoms which are tubercular. But for the post part, I think it is possible to make the diagnosis even without a history, only the physical signs.

It is the object of this paper to go over a much talked over subject and speak of some of the means of making a diagnosis and to call attention to some of the essential points in the physical examination. Most of us are practicing general medicine and are not T. B. specialists; we do not have patients sent to us with our attention especially called to the chest, but the patients come to us with their various complaints, cough, hemorrhage from the mouth, stomach complaints, loss of weight, catarrh, palpitation of the heart, temperature, etc., and it is our duty to treat these, and in order to do so, we first of all must find out what the trouble is. Many of these have not the appearance of tubercular patients and give no history which would suggest such a diagnosis, but if we are to keep from making too many mistakes it is our duty to go over the lungs carefully and systematically, and I can say rapidly, for I think it is possible to tell whether a patient has tuberculosis in a very few minutes, and this is essential, otherwise it will not be done by most general practitioners.

Before going into the examination of the chest I want to say a little about Pulmonary tuberculosis in general. It is generally conceded at the present time that most of us have had some focus of tuberculosis at some time in our lives. Some say that 90% of children eight years old will give a positive Von Pirquet; whether the last statement is absolutely correct is a question, but neverthe-

less a large proportion of us have had tuberculosis to a greater or lesser degree. This being the case, most of us have either completely recovered or belong to the class of inactive tuberculosis, and the balance are either acute tuberculosis or chronic active tuberculosis. I want to get this distinction of class clearly before you. We have for practical purposes three classes of cases: (1) acute, (2) chronic-inactive, and (3) chronic-active.

(1) Acute. These are the beginning cases, those who have no signs of past history, such as dullness, increased voice or breath changes, nothing but crepitant or sub-crepitant rales, and I must say that I think these are very few and the examiner should be very careful in making such a classification.

(2) Chronic tuberculosis, inactive—This is the big class, the class who have had tuberculosis, whether in adult life or as children, whether it has been called so or not, whether their signs show small old lesions or large; but they have signs, not the signs of active tuberculosis but the signs which have taken years to produce, such as dullness, which means fibrous tissue, or changes in voice or breath which is caused by changes in the lung due to time and fibrous tissue. This is the great class we run on every day in our examinations and we are called upon to say whether or not they are tubercular, whether they are active or inactive, whether they need treatment or not.

(3) Chronic tuberculosis, active. This is the class which has more or less signs of chronic tuberculosis, that is, dullness, changes of voice and breath, and on top of this are signs of activity, which are crepitant, sub-crepitant, fine and medium mucous rales, and the symptoms, fever, night sweats, loss of weight, rapid pulse, etc. To go back again, we have three classes: (1) Acute, (2) Chronic, inactive, (3) Chronic, active.

It is very important from the patient's standpoint to determine to which class the case belongs. If he is acute we know he should be treated; if he is chronic-inactive with no symptoms except maybe a dull apex and broncho-vesicular breathing, or even if he has dullness down to the second or third rib with both voice or breath changes, if he is robust and has no symptoms, we should call him chronic inactive, but not brand him as a tubercular patient needing treatment for these old signs are past history and as long as he keeps his resistance up to normal he will probably remain inactive. If he is chronic activie he should be treated. And it is the determining between these last two, active or inactive, where we will have the difficulty.

I shall say little about methods of examination other than auscultation, for inspection, percussion and palpation are methods which tell us not of active tuberculosis but give us the signs of old fibrous lesions, and in many cases arrested. They tell us of the past and not of the present. I do not wish to ignore them for they serve their purpose, by differentiating between acute and chronic cases; but in looking over our case why not take a short cut and find out at once whether our case is active or not? What is the use of spending time with inspection, percussion and palpation, when by auscultation we will get a great deal more useful information and will get it in much shorter time. The particular method of auscultation I refer to is auscultation with cough. If done properly it certainly will bring out rales which can be heard in no other way and it is by rales we make our diagnosis of activity.

This is the method: Have the patient take an ordinary inspiration, then a long expiration and cough. Then repeat again and again. The idea of course is to empty the smaller bronchioles or the alveoli of as much air as possible by expiration, then by following this with a cough the balance is forced out which allows the walls of these to collapse, then when inspiration takes place, if there is any moisture rales will be produced. It is very important to demonstrate to patient, for it seems difficult to get him to understand what you want him to do without showing him.

A point which is of value in this method is to lift the bell of your scope just before the patient coughs; if you don't the jar of the cough is very disagreeable to the examiner's ears, and besides the jar to your ears, interferes with the proper appreciation of any rales which may be heard on inspiration, at which time you are looking for them most especially. In going over a chest by this method you can detect any rales which may be present, besides if there are any breath changes these will be detected. So active tuberculosis in a large percent of cases can be picked up by this one method. Of course if rales are found and there is any suspicion as to T. B. all the other methods, such as inspection, percussion and palpation are tried in order to confirm or condemn what impressions you get from auscultation with cough.

If you do not find any rales it is pretty safe to say you have not active tuberculosis—chronic or acute.

You may have chronic-inactive and if so, in listening for rales you will most likely by the change of breath sounds get some suggestion, and then is time to inspect, percuss and palpate and determine the extent of the lesion. Suppose you find rales, these may indicate acute tuberculosis or chronic active. Now what are the rales we are looking for? A word as to their significance.

Before I speak of the rale, will you allow me to speak briefly regarding the stethoscope, and I am taking it for granted that we all use stethoscopes and have abandoned using the ear directly to the chest. I want to commend the small round bell for it is with this kind only that you can get into some apices and can get actual conditions in thin chests.

Rales, as we all *should* know, are produced by the movement of air in the lung, in the presence of moisture. They are of two kinds. Rales of acute inflammation and rales of congestion, by which I mean chronic inflammation or chronic irritation. The acute inflammation rale is the same we find in acute inflammatory conditions of the lung due to pneumonia, the crepitant and the sub-crepitant rale, the rale of the alveolus and the rale of the smaller bronchiale respectively. It is the pneumonia rale, and therefore when we find these rales we have a tuberculous pneumonia and therefore an acute condition. These rales are very distinctive and have certain definite characteristics. They must be fine, occur in showers during inspiration only, they must all be of the same size and persistent. In brief, fine rales, of the same size, in inspiration only, always in showers and persistent. This is the rale of acute tuberculosis, and this rale must be present when we make the diagnosis of acute pulmonary tuberculosis, and it is by this sign alone that it can be made, as the acute lesion is too young to have the signs of fibrous changes, and we have

the area, small or large as the case may be, of tuberculous pneumonia which we call acute tuberculosis.

The other kind, which has been termed indeterminate, are the rales of congestion, and accompany chronic inflammatory and irritative conditions, which are less acute than the tuberculous pneumonia.

They differ from the inflammatory rales in that they have no fixed place of origin, no fixed size and are not connected with any definite period of respiration, though most often found in inspiration. They are produced by the movement of air through tubes or cavities in which moisture is present and vary according to the size of the container and the amount and degree of viscosity of the fluid. Usually, the indeterminate rale is a bronchial rale as the sub-crepitant rale is the rale of the bronchiole and the crepitant rale is the rale of the alveolus. The indeterminate rale is the rale of the chronic stages of tuberculosis. It is very necessary to differentiate between these two kinds, for one is acute and the other is chronic. The one may be very active and need treatment, and the other may need treatment or may not.

There are heard over the chest what may be taken for tuberculous rales and I would call your especial attention to these:

First. The so-called atelectatic rales of the apex, which are heard on the first full inspiration and are not repeated in subsequent inspiratory acts; these should be disregarded.

Second. Faint rales below and near the angle of the scapulae may be heard after a common cold, these are generally symmetrical and can be distinguished from tubercular rales by the absence of changes in percussion, breath sounds and transmission of voice.

Third. Occasionally, scanty coarse mucous rales persist for a long time in lesions which are old, fibrous and practically obsolete, the subject being in apparently vigorous health, these may not be necessarily true tuberculous rales.

Fourth. Sounds resembling rales, known as marginal rales, are frequently heard in the healthiest men, at the base of the lungs during inspiration, especially in the axilla, sometimes only on one side, sometimes on both. They are caused by the separation of the pleural surfaces as the edge of the lung penetrates into the complimental space. They are not to be regarded except to differentiate from friction sounds, which can be done by noting that the marginal rales are limited to the border of the lung, and by the absence of other signs and symptoms.

Fifth. During strong respiratory movements and especially after cough, the bending of the sternum produces fine crepitations which may be transmitted for a short distance to the surrounding lung.

Sixth. Sounds originating at the Costo-sternal articulations, these occur in athletic men and strong breathers who have strained the articulations, these have a bony quality.

These last two, the bending of the sternum and those originating at the costo-sternal articulation may be differentiated by having the patient close his mouth and hold his nose and go through the motions of deep breathing but of course not breathing; if there are any clicks heard the lung can be ruled out as no air is circulating, therefore it is by exclusion necessarily an extraneous sound.

Seventh. The sounds made by the patient swallowing may be taken for

rales, and patients are more apt than not to swallow with this method of auscultation and cough.

From what I have said it might be inferred that it is easy in two or three minutes to listen to a chest and say without asking any questions, you have acute pulmonary tuberculosis, or you have chronic pulmonary tuberculosis inactive, or chronic pulmonary tuberculosis active, as the case may be. I do not wish to make any such impression but I want to lay down the primary rules. That we have acute tuberculosis and chronic, and that the chronic may be either active or inactive. That the rale of acute inflammation is the crepitant and sub-crepitant rale, and it is by auscultation and the detection of this rale and no other method that this diagnosis can be made.

That the rale of chronic inflammation is the indeterminate rale, a larger rale than that of inflammation and that which occurs in the larger bronchi. That the extent of the involvement and its age are determined by the amount of fibrous tissue which has been produced, and the latter can be determined by inspection, percussion, palpation and auscultation.

Neither do I wish to leave the impression that we have one kind of rale, and one only, in a particular class of tuberculosis, for of course this is not true. For example, in chronic tuberculosis active, the indeterminate rale is the rale which predominates, but we may have and frequently do have the rale of acute inflammation also.

I have spoken on this subject and of course have dealt with it in the most superficial way but I hope I have called attention to a few important facts.

(1) Many cases of tuberculosis are overlooked by improper examinations and failure to examine.

(2) Many cases are called tuberculosis active when they are chronic inactive.

(3) That a lot of time is lost in the routine examinations by not going directly to auscultation and cough and leaving the inspection, percussion, palpation and ordinary auscultation to confirm the findings obtained by the cough method.

(4) That the rale is the most important of all signs to be looked for and that it can be classified so as to separate the acute from the chronic cases, and that the method of auscultation and cough is the best method of doing this.

MEDICAL EDUCATION PROVIDED BY THE STATE OF WEST VIRGINIA

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Read Before the West Virginia State Medical Association, at Parkersburg, May, 1920.

Instruction in anatomy and physiology was provided early in the history of the University. This was before the time of the standardization of courses in medical schools, when the courses were largely didactic, when two terms of six months was the requirement in most schools for graduation and even then the same courses of lectures were often given to both classes. Anatomy and elementary chemistry were about the only laboratory courses given. Dissection was usually done at night often in an indifferent and hasty manner. No effort was made by the state to organize the work so as to cover the requirements of a complete medical course. During this time many

of the practitioners of our state got their first inspiration for medicine while attending the University and they were able at times to get more or less credit in other schools.

In the late nineties, Dr. Jerome Hall Raymond came from the University of Chicago as president. He was enthusiastic and progressive with a vision of greater usefulness for the University. He began the work of general reorganization. Unfortunately for the University, he was too hasty, impatient and impolitic to carry his plans to fruition. However, he aroused the University from its lethargy and gave it an impetus which kept it going for a long time after he ceased to be president. One of his plans was for a medical school of at least two years. Part of the faculty was chosen, some equipment was purchased, but it never was started because it was found that it was impossible to get the proper recognition for the work if done, so the plan was abandoned. However, the chair of anatomy and physiology was retained and instruction was continued during the new president's administration.

In 1902, the chair was made vacant because of the ill health of the professor of anatomy. The writer was chosen to fill the vacancy. When I arrived I found the interest of the president in medical education was at a very low ebb if measured by my rank, which was that of an instructor and with a salary of eight hundred dollars a year. This was certainly not a very flattering prospect for a man who had spent eight years in college preparing for a medical career. However, I was full of enthusiasm and had a vision of a medical school in which West Virginians should find at home and at a minimum cost what they were compelled to seek elsewhere and often under great hardships. I found that by utilizing the departments of chemistry, zoology and physics, and by undertaking to give gross and microscopic anatomy, physiology and materia medica, I could start the first year in medicine.

This now seems very pretentious, but if your memory will go back eighteen years, you will remember that Johns Hopkins alone required a degree for entrance, that the best of the other schools required only a high school education and the majority of medical students were accepted on as little as a teacher's certificate, which had a doubtful value. Then there were few full-time professors and most of them received their pay either from the tuitions of students, or from the prestige of being connected with the medical school. Without having had the course announced in the annual catalogue so as to attract students, with only a small announcement hastily gotten out, we interested nine students in the work. We were all enthusiastic and things went on as well as could be expected with our limited facilities.

The next thing was to obtain recognition for our work, so that the students' time would not be lost. While at the Johns Hopkins, I had heard the men connected with the College of Physicians and Surgeons highly praised. I went to Baltimore, had a conference with their faculty. I found them interested in us. I promised if they would enter into an affiliation with us and take our students into their third year class, that we would guarantee to send only students who would be as well prepared as theirs. They agreed to the affiliation and never had cause to regret it. I returned and laid the matter before the president. He was much pleased, since it would complete the usual number of colleges, generally constituting a university. This

action was a little later sanctioned by the regents and so the College of Medicine was established. Five students completed the first years' work and entered the College of Physicians and Surgeons. One fell by the wayside, one dropped out because of sickness and three finished the course. Two of these ranked high enough to receive honorable mention.

In 1903, the regents enlarged the medical faculty by the addition of Dr. Justin F. Grant, who took over the instruction in anatomy including pathology. By utilizing the botany department for our work in bacteriology, we were able in 1904 to schedule a two-year course. As requirements for entrance have been raised we have been able to shift the basic sciences from the medical to the premedical courses. This has enabled us to strengthen our work very materially, so that at present our number of hours of instruction exceed that required by the Association of American Medical Colleges.

An inventory of equipment which was found on starting our medical school showed one articulated skeleton, a few loose bones, a few anatomical models, fourteen microscopes, a microtome and a partial collection of crude drugs. The rooms for teaching consisted of a basement laboratory in the northwest corner of Woodburn Hall, and a small frame building in a hollow which was the anatomical laboratory. When the president was asked to furnish us with disarticulated skeletons, so that each student could be properly supplied, I was told there was no money. In order to get them, I had to furnish the money myself which was later repaid by the state. At the same time, the School of Music was getting everything it wanted. I have found it necessary at many times to provide for our wants from my own fund, but after several months have been remunerated.

This enlargement of our work to two years made more room necessary. When we appealed to the president he said there was none. We pointed out to him that there was a small dwelling house on the campus which was being only partly used by a class in English literature and that a minor course. Still the president refused to let us have it. I went to the instructor who was a sensible, accommodating woman and laid our case before her. She saw our great need and said her two brothers had been physicians, that she had been accustomed to skeletons all her life and that the odors from the cadavers she felt sure would not disturb her. Knowing the inconstancy of human nature we acted immediately and moved all our anatomical material. In the afternoon she came to see me and said that in thinking over the matter she believed she would have to change her mind. I told her we were sorry but that the thing was done. We had moved in. More suitable quarters were found for her in an unoccupied room in the handsome new library.

Again when our student body outgrew our cramped quarters, we appealed to the president for relief. His reply was to get so many students that they would break down the walls and then new quarters would be provided by the regents. His interest was limited only to the increase in number of students and that the medical announcement looked well in the catalogue. During his incumbency there was no effort made to make the school worthy of the state.

When the A. M. A. began the efforts to standardize medical schools, our was placed in Class A. This was done not

because we ranked with the best schools in buildings, equipment and teaching force, but because they did not wish to be too rigid in their requirements at first and because they expected that all State Universities would take pride in seeing they would be in the forefront of medical education. So also, in the second classification, we were left in Class A, although other schools had advanced while we had not.

Then the Carnegie Foundation was invited to make an impartial inspection of the medical schools of this country. Their report of our school was very humiliating and doubly so because it was true and could have been avoided had the proper interest been taken in so important a branch of education.

Shortly after this, Andrew Carnegie made his contribution of ten million dollars for a fund to pension teachers who were disabled or who had reached the age of sixty-five. How the schools did hasten to divest themselves of any incumbrances such as religion or politics which would prevent them from sharing in the great benefit. Here was a decent means without the reproach of ingratitude of getting rid of men who had served their usefulness. West Virginia found she had use for the pensions but the question was raised whether her colleges had the rank to entitle her to its benefits. It was suggested that the College of Medicine should be either financed more liberally, to place it abreast of other schools, or it should be abandoned. It was here that the influence of this Association was felt. In the face of a resolution passed by this body, saying that any effort to deprive our youth of the opportunity of a medical education at the University and along with this, letters from prominent members praising the efforts we were making to render opportunities for a medical training at the least possible expense to our citizens, caused the regents to pause.

It finally resulted in a camouflage. The College of Medicine was abolished, but the work was continued in toto in a department of medicine in the College of Arts and Sciences. This may have been intended to hoodwink both the Carnegie Foundation and the physicians of the state. It at least obtained pensions for four professors including the president when he was retired.

Notwithstanding the change, the work was continued although there was not so many students. No trouble was encountered until we tried to get credit for our work. We found that no one would give credit to arts and science students. This had been fully explained to Dr. Hodges, the new president, and to the Board of Regents by a representation of the Association of American Colleges, but they could not understand why a rose by any other name would not smell as sweet. In this case it did not.

I was sent to Chicago to the annual meeting of the Association where I was told that the constitution of the Association did not recognize work unless it was done in a bona fide medical school and either we would have to change our name or they would have to change their constitution, which they were unwilling to do. We were told that there must be a re-establishment of the school, the appointment of a separate dean, so as to make it entirely independent of the other colleges. Up till this time, while I had all the work and responsibility of dean, my official title was head of the faculty of medicine. No action was taken by the regents on my return. In the meantime, the twenty students in attendance became restive. They hired a lawyer who threatened to bring suit against the Uni-

versity for thirty thousand dollars for breach of contract because they were told that they would be able to get credit for the work and they were finding they could not. It happened shortly after this lawyer became busy that the Board of Regents met in Morgantown. They re-established the work as the School of Medicine and expressed the greatest interest in our welfare. It was no longer to be the policy to confer the M. D. degree however. The affiliation had previously been cancelled because of the Carnegie criticism that we were affiliated with P. and S. and granted our degree for two years' work done in Baltimore and over this we had no supervision.

We were all jubilant. We expected at once that every effort would be made to get us out of Class B and that we would have the many things we were urgently in need of but things remained just where they were, except that I was given the title of dean. Some of our faculty left and it was difficult to keep things from going to pieces.

Then came the contest in the primaries for governor. I received a letter from Dr. Hatfield saying that if he were nominated and elected he would see that the school was placed on the proper basis for recognition. I showed the letter to the president of the University. He began to take interest in the medical school and as Dr. Hatfield gained strength I got more encouragement and when he was nominated the president became enthusiastic for medical education, but not until he was elected did there come any substantial proofs of his interest. Then I could get things long desired but for which there never before had been any money. Our laboratories were then enlarged and improved, equipment was added in large quantities. Through the action of the State Board of Health, the Hygienic Laboratory was established in connection with the School of Medicine. This gave us the use of their equipment and we in turn gave supervision to their work. We greatly appreciate their valuable co-operation during the time that the laboratory was at the University. Relationship was harmonious and mutually beneficial. However, it was better to have all the activities of the Board of Health located in Charleston.

When the next inspection was made, the committee were pleased with the great improvements effected, but still they thought it did not warrant being given an A rating. While our faculty had been brought up to the required standard, the proper building was lacking. There had been appropriated by a previous legislature twenty thousand dollars which was intended to repair Commencement Hall. For some reason it had never been used. Governor Hatfield used his influence to have this expended for a medical building. This was done and a new, three-story brick building 55x74 feet was erected. It was intended to house the School of Medicine, the Hygienic Laboratory and the Department of Pharmacy. The total cost was eighteen thousand dollars and it could not be duplicated today for sixty thousand dollars. The laboratories are all well lighted and with the exception of their small size are all that could be desired. They will not accommodate comfortably more than twenty students, with the exception of the anatomical laboratory which could be used for fifty. The capacity of the building was tested the second year after its erection.

With the new building and equipment came a Class A rating. Students came in as large numbers as we could handle with our limited faculty, which consists of six full-time professors, two part-

time local physicians and two assistants. It has demonstrated what we have always contended, that the only thing needed to get medical students was to give them something worth their while and they would come. So long as our laboratory facilities were inferior and our rating B, we could not expect students to come, yet in spite of these misfortunes, we have never failed to place our students in good schools and in turn, no school that has taken our students has had reason to regret it. We have had remarkably few failures. During our affiliation with the College of Physicians and Surgeons, we had five graduating classes. We took one first gold medal and two seconds and had twelve honorable mentions. When one reflects that the classes usually number more than seventy and we had as few as three and never more than twelve, we took more than our share of honors. We have been represented at Columbia University, Jefferson, University of Maryland, Ohio State, Western Reserve, University of Tennessee and the University of Cincinnati. In the graduating class this year at Jefferson, there are 168 members, three of which are our students. One of them has been chosen by the faculty as class orator and has been elected as one out of fourteen chosen for membership in the honorary scholarship medical fraternity, the Alpha Omega Alpha. Words of praise come from the other schools where we were represented.

I am often asked if a student can enter any of the Class A schools after finishing our work. I have to say, no. Some of the schools require a degree for entrance. We require what most of the schools demand, two years of college work. Some schools, like Hopkins and the University of Pennsylvania restrict the number of students in each class. There are so many applicants to choose from that they start with a small prospect of any failings. So, unless this happens, or someone dies, there is no place to be filled. So you can see with the small body of students we have had, they have not tried to enter each of the 68 Class A schools. Students like to go where there are other West Virginia students. This accounts for the fact that most of our men have gone to Western Reserve, Cincinnati, Jefferson, University of Maryland and the College of Physicians and Surgeons at Baltimore.

Our present enrollment is our largest —thirty-one first year and twenty-four second, a total of fifty-five men. Besides there are several arts students who do some work with us. This has resulted in some of our classes having as many as 36 students. You can see how crowded must be the laboratory intended for not more than twenty. We have only one small lecture room and so the laboratory must be used for recitations.

There are forty students in the class which will begin medicine this September and 85 who will enter in 1921. Twenty percent of our present classes receive their preparation elsewhere. If they all came to us, we will have to double all our laboratory classes.

This leads up to the purpose of this paper. The state cannot shirk her responsibility by sending her citizens to other states to be educated just because it may be cheaper than to furnish the facilities at home. No school receives from a student the full cost of his education in tuition. The average cost is from five hundred to one thousand dollars. At Johns Hopkins, where the tuition is two hundred and forty dollars, the cost per student is seven hundred and fifty dollars. With us, it is between three and four hundred dollars. It would be just as logical to close the whole University

and for the state to pay the tuition of every student at the Ohio State University, for instance, as to refuse to furnish adequate medical instruction. The public must bear the extra expense, otherwise the profession would be limited to the rich and well-to-do classes. There must be provided a new medical building adequate for our present needs and for the future when we may be called upon to have seventy-five or one hundred students in a class. Our present building was too small the day it was made. The new building must afford sufficient number of lecture rooms, large, well-lighted, fully-equipped laboratories for the use of students and what are now lacking, private laboratories where teachers and advanced students may do research work, without which no school can do its best by the student, to science and to the public health. The faculty, which is now the minimum, must be enlarged so that more attention can be given each student and still leave the professors time for scientific investigation.

Another urgently needed thing is a larger and more complete medical library. At present our sets of scientific journals are very incomplete and our files of current magazines are not as extensive as we wish. We cannot do our best teaching or research work unless we have all the books and journals we need.

The increasingly large number of students which we turn out in our second year class has begun to embarrass us in finding places for all of them. Medical schools are more and more restricting the number in their classes and this does not permit the absorption of many more into their third year class.

We must look to the time and that soon when we will give a complete four-year course in medicine. It is due the young men and women of our state that every effort be made to lighten the financial burden of a medical education. No other profession requires so long a time in preparation and so much money for tuition and equipment. Eight years is about the shortest time a physician can take for his college years, his medicine and his intern work. During all this time he is unproductive of money. The community demands well-prepared physicians and the state should provide as much as she does for lawyers, engineers, teachers, farmers and for gentlemen and ladies of leisure.

For this work the state must have large, well-equipped hospitals which should make the school of medicine the medical centre of the state, where the counties could send their poor, where the average citizen and the well-to-do could find as good facilities and skill as in the large centers, where the physicians of the state could consult in any doubtful case and where services could be rendered without regard to fees.

It has recently been suggested in the newspapers that the medical school should be located in one of our larger cities, where there will be a large industrial population which will insure more material for clinics. This is the case in many of the states where the University is not in the largest city. It will be a matter for the legislature and the State Board of Education to decide.

How is this to be accomplished? When our school was on the verge of extinction, it was the influence of this Association which saved it. All we need to do is to get back of the movement for a larger and better medical school and the Board of Control and the Legislature will provide funds. We must put up a united front, send a committee of our ablest men to present our wants to the budget committee and then each one of us see that

the members of the Legislature from our representative counties are pledged to its support.

At the recent legislature, one hundred and twenty-five thousand dollars was appropriated for a new law building. Now it is found it will not build it, much less equip it. We must ask for at least three hundred and fifty thousand dollars, which will provide the building and its equipment. When we get a new medical building our present building will be used for pharmacy. They are as badly in need of enlarged quarters as we are, but owing to the lesser demand for pharmacists, this building will be ample for several years. The State Pharmaceutical Association wish to have the School of Pharmacy separate from the School of Medicine. Their association will back us for a new building which will place their school in a position of greater dignity. With the united efforts of both these associations, with the president of the University and the Superintendent of Schools M. P. Shawkey in favor of our plans and with some physicians always in the legislature who will take the lead in the fight, and the encouragement of the doctors back home, we cannot fail to win.

APPROVED MODERN METHODS OF ANESTHESIA

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Read Before the West Virginia Medical Association at Clarksburg, May, 1919.

Gentlemen, this is the first time I have had the pleasure of reading a paper before this society. So much has been done during the past few years in Anesthesia that we should all be better acquainted with newer methods as well as decide among ourselves if they are better and safer than the old.

The word "approved" in this paper means that the methods I am to speak to you about are in use in some of the larger clinics and a few of the smaller ones at the present time and proven satisfactory.

To be practical, several rules should be laid down for the administration of a general anesthetic; namely:

(1) The anesthetic should be suited to the patient and should be modified, or changed entirely, as indicated.

(2) The introduction should be pleasant to the patient, with respiration, blood pressure and color reflex continuing normal.

(3) The maintenance of anesthesia should vary with the surgeon's needs; at the same time the patient's condition should be as nearly normal as possible.

(4) The transition from the anesthetic stage should be as gradual and as smooth as the induction, the patient emerging as from a quiet sleep, without pain, nausea, or conscious or unconscious vomiting.

All this is accomplished by modern methods, not yet in common use by many surgeons where only one method is used.

Anesthesia is a vital part of the practice of medicine, and the adoption of any one method or anesthetic, regardless of conditions, is contrary to the fundamental principles that should govern all surgical operations and the administration of all drugs.

The selection of the anesthetic is most important and in most hospitals today ether and chloroform are the agents selected administered by the open drop method, all of which has been discussed before this society at former meetings.

Nitrous Oxid-Oxygen is another of the newer forms of anesthesia that is constantly gaining advocates. There is no question but that straight ether, from the point of use, is the leading anesthetic at the present time. But ether has certain physiological effects that greatly mar its usefulness. Its persisting and nauseating odor, its long and unpleasant induction, its long period of elimination, its irritating effect upon the organs of elimination and respiratory tract, its destructive action upon the red blood cells, its impairment of resistance against infection, and its general toxic effect as evidenced by nausea, vomiting, and depression render it far from the ideal anesthetic. Many patients who have had experience with ether anesthesia remember its unpleasant features more distinctly than those of the operation, and do not fail so to express themselves to their friends. Thus both patients and friends often come to dread the anesthetic more than the operation. This pre-anesthetic fear, and most physicians do not recognize how much fear often exists is highly productive of shock and greatly increases the very features of which they are in such dread.

The ideal method of anesthesia from the viewpoint of results unquestionably is in the system of anoci-association as developed and used by Crile. Anociation may be defined as absence of harmful association or impulses, and is applicable to the entire treatment, care, and environment of the patient. With perfect local anesthesia a light anesthetic like nitrous oxid is all that is needed to bring about a satisfactory narcosis, so this agent has been selected as part of the anoci system.

Some surgeons, however, are using nitrous oxid-oxygen-ether sequence for general anesthesia and omitting the local anesthetic, the results obtained are not quite so good as when the full anoci system is used, but it is the object of this paper to describe some of the advantages this method has over open drop ether.

The rather erroneous idea exists that nitrous oxid is dangerous, that a certain amount of cyanosis is necessary in order to obtain the stage required for operation, that it is suitable only for short anesthetics. There was a time when this was true, but during the past ten years the methods of administering nitrous oxid with more improved apparatus and with certain definite quantities of oxygen, this method now takes first place as far as safety is concerned of all inhalation anesthetics, and the few deaths that are credited to this method, a fair proportion, no doubt, was due to imperfect knowledge of its administration.

I know of no other method in use today for general anesthesia where it is so necessary to have both the theoretical and practical knowledge of its administration as nitrous oxid and oxygen, and its employment should not be attempted until a thorough course is taken and a number of anesthetics given at one of the larger clinics such as Lakeside Hospital, Cleveland. If its administration was attempted generally by the untrained as in open drop ether the fatalities would far exceed any other form of anesthesia, but, on the other hand, when given by one trained and suited for this sort of work it conforms more nearly with the four laws I mentioned in the beginning of this paper than any other method known today.

With a competent, trained anesthetist and the proper apparatus, nitrous oxid and oxygen can be administered for long periods in major surgical operations. Cyanosis can be at all times avoided, and, in fact, the color reflex maintained bet-

ter than by the open drop ether method. The induction is pleasant to the patient because gas is odorless and tasteless and few inhalations produce unconsciousness. It is quickly eliminated, it does not irritate the respiratory tract or kidneys, nor destroy the red blood cells, nor impair the patient's fighting forces against infection, nor dissolve the lipoids of the cells of the brain or other organs, and it produces very little nausea, vomiting, and depression.

Crile's researches show that when tissues are traumatized, as for instance in surgical procedure, afferent nerve impulses continually pass from the traumatized area to the brain, and produce corresponding injury and exhaustion of the brain cells, (in other words, shock) even though the patient is anesthetized; that the general anesthetic prevents only the efferent impulses, and does this by breaking the arc between the cells of the afferent and efferent centers in the brain. Also that under nitrous oxid anesthesia the amount or degree of shock is only a fractional part of that produced by equal trauma under ether anesthesia.

One disadvantage nitrous oxid has lies in the resulting anesthesia, which is not of sufficient depth to serve alone in many cases. The muscles are not relaxed as under ether narcosis. Of course, I am speaking of cases where nitrous oxid is used without nerve blocking.

Preliminary medication by morphine sulphate grain one-sixth and scopolomine grain one hundred and fiftieth from one-half to one hour before operation renders nitrous oxid anesthesia deeper and smoother, and ought always be used in all prolonged administrations. Scopolamine has a special sedative effect upon the higher cerebral centers. This particular medication is an important factor in this system whether nerve blocking is done or not, substituting atropine for scopolamine alters this factor. If this does not produce sufficient depth of anesthesia, ether should be added in small amounts, as an adjuvant to nitrous oxid. The anesthesia is thus quickly deepened to any desired degree, and as a rule far less ether is required than if given alone, as in the open drop method. Even in long administrations of gas by the closed method, I seldom ever use more than an ounce or two of ether. The amount thus required is so small that it is below the threshold for the manifestation of ether toxication. Patients recover consciousness almost as rapidly as when nitrous oxid and oxygen is used alone, and as a general rule there is little or no nausea or vomiting or knowledge that any ether was given.

In two step operations gas is especially desirable since the patient having experienced no distress with the initial anesthesia, returns for the larger operation without concern and thoroughly reassured.

With the closed method of administering nitrous oxid, oxygen and ether, pneumonia is reduced more than fifty per cent, post operative nephritis becomes extremely rare; there is less liklihood of nausea, and nourishment may be given relatively early. Often the patient does not miss a single meal.

In acute infections, such as peritonitis, nitrous oxid has a special advantage, in that it does not reduce the resistance by breaking down the phagocytes as is done by such lipoid solvents as ether. In fact, shock and reaction so often seen after operation for peritonitis is not noticed when gas anesthesia is employed. There is no elevation of the temperature curve. Gas preserves the body's energy and protects the brain cells from trauma.

In my work in the operating room I constantly notice the protective effect of nitrous oxid, even though the operation is protracted for an hour or more, the pulse is not accelerated in the majority of cases as under an open drop ether narcosis. In fact at the end of the operation the pulse is often slightly lower than at the beginning. The so-called painful scar on the brain is not so marked.

In obstetric practice Nitrous oxid is used with success. If a few whiffs of gas are given with the onset of contractions and replaced by oxygen as it passes off, the patient soon loses all sensation of pain, but still retains consciousness. Nitrous advantage has this advantage over chloroform; it stimulates rather than diminishes the frequency and intensity of uterine contractions during the second stage and thereby actually shortens the duration of labor.

Having administered nitrous oxid and oxygen in a number of normal labors I am prepared to state that perfectly satisfactory analgesia can be produced by its means, although full anesthesia must be induced as the head passes the vulva, furtheremore gas does not predispose to excessive postpartum bleeding, and apparently has no injurious effect on either mother or child.

I have administered gas for several Cesarean operations and the results obtained were very satisfactory in every respect.

For the after dressing of wounds gas is indicated since there is no nausea or bad after effects, and patients recover consciousness very shortly after inhaler is removed from face.

The induction stage of open drop ether is generally extremely disagreeable to the patient, and if for any reason the open drop is preferred, it would be infinitely more pleasant to start the anesthetic with nitrous oxid and oxygen. This indeed is the practice in a great many institutions where surgery is done, especially where the prolonged administration of gas has been unsuccessfully attempted. There is this advantage: The patient breathes the pleasant nitrous oxid and loses consciousness in from a half to one minute, the second stage or stage of excitement is bridged over in nearly 100 percent of cases, there is little or no struggling, and when the patient is thoroughly asleep, generally in two or three minutes, change is made to open drop ether. This method, or the gas ether sequence will, in the majority of cases eliminate all those otherwise disagreable features of the beginning of an ether narcosis.

There are comparatively few contraindications to nitrous oxid and oxygen, and while I am not in favor of the employment of any anesthetic agent or method as a routine, I will say this much, from the experience of others and my own experience I think it has a wide range of usefulness. It is not suitable for very young children or persons with a generally weakened musculature, or for the very old as they don't seem to be equal to breathing through valves, for these cases an open method would be better.

For strong, muscular, athletic, alcoholic and obese subjects, or persons with any obstruction to the air passages, such as enlarged tonsils, adenoids, etc., nitrous oxid is contra-indicated unless employed with the utmost skill.

The warming of gases and vapors for anesthesia presents an interesting problem. Numerous experiments have been performed on animals, in each case it was found that it took considerably longer to kill animals with an anesthetic warmed to body temperature than with

cold mixtures, the logical conclusion would be that warming the anesthetic would increase the margin of safety for human subjects. Most of the newer apparatus has a device for warming the gases.

The value of oxygen in anesthesia and in the operating room is not generally appreciated. Gwathmey of New York in a number of experiments on animals with ether and chloroform found that it took much longer to kill when these agents were administered with oxygen than with air. Clinical results in the operating room also show that any anesthetic agent is safer when administered with oxygen. It is claimed that when chloroform is given with oxygen that it is as safe as ether by the open drop method with air, and that the after effects of both ether and chloroform are as a rule much less marked when oxygen is used throughout.

Following operations it is well to give by rectum, and by the drop method a solution of sodium bicarbonate and glucose, using one ounce of each to the quart of water, one or two pints given every four hours for from 24 to 48 hours. The drop method is usually employed, but if this is not well borne it is given as an enema to be retained. This used as a routine will tend to combat shock, prevent acidosis and tissue waste, and is readily taken up and utilized by the body.

Anesthesia is such a broad field and presents so many problems that only a few can be taken up in writing a short paper. I have devoted most of this to nitrous oxid and oxygen because I believe it is a method that should be more generally used for it is a very valuable addition to the other methods we use and have found good.

THE PRE-OPERATIVE AND POST-OPERATIVE TREATMENT OF PROSTATIC HYPERTROPHY

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and
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Read Before the West Virginia State Medical Association, at Parkersburg, May, 1920.

Although this subject has been much discussed, there have been many contributions in the past year and we believe there is no operative procedure, in which the preparatory treatment and post-operative care are so important to the patient as prostatic hypertrophy. Scherck and Jost[1] found upon investigation of the annual reports of several general hospitals that the average mortality rate was above twenty-five percent, while in the hands of some operators it was as low as three to five percent. This variation is unquestionably due largely to the proper pre-operative and post-operative treatment.

In prostatic hypertrophy we have a mechanical obstruction to the urinary flow. The bladder, subjected to a greater task, develops thickened walls, cannot completely empty itself and therefore contains a variable amount of residual urine. This residual urine, through back pressure impairs the function of the kidneys and lowers the resistance of the bladder, which nearly always becomes infected. The worry of frequent painful urination, acute or chronic retention, loss of sleep, the presence of an infected urinary tract, plus impaired kidney function to our patient, in whom age has already caused a lowered resistance, gives us a problem most difficult to solve.

In spite of this, however, careful preparation, a well chosen operation, and proper after care will show a surprisingly low mortality.

The first step in our preparatory treatment is drainage of the bladder, with frequent irrigations. This relieves the bladder of most of the residual urine, relieves the pressure from the kidneys and lessens the virulence of the infection. Care should be taken not to relieve the pressure too suddenly as the resulting kidney congestion often leads to renal suppression. We agree with Morton[2] that the best method of drainage is by means of the permanent indwelling catheter. There are, of course, a small percentage of cases in whom a catheter cannot be passed and who cannot tolerate the cather. In these cases, a suprapubic drainage must be resorted to. With this method, the patient usually remains wet, often has infection of the wound edges, does not give as perfect a drainage, inasmuch as it is uphill and destroys one of our most valuable kidney function tests, the phenol sulphone phthalene. Wright[3] points out that cystotomy relieves the back pressure suddenly and the danger previously referred to. These facts, to our minds, offer the greatest objection to the two stage suprapublic operation, and we believe that by either the suprapubic or perinneal route, catheter drainage offers the patient the better chance. Drainage with frequent bladder irrigations should be continued until the patients' general condition and kidney function arrive at a safe point for operation.

Estimation of the kidney function should be done when our patient is first seen and at frequent intervals during his preparation. The kidney function is not only our most reliable guide as to the time to operate, but affords us a reliable prognosis. The functional tests to be employed are the phenol sulphone phthalene test of Rourstree and Geroghty and the blood urea and creatinin. Squier and Myers[4] have shown that the blood urea and phthalene show parallel readings in the large majority of cases and advise against operation when the blood urea is above thirty milligrams per 100 c. c. of blood. Both tests should be employed when possible, but in a great many locations it is impossible to resort to blood chemistry. We believe the phthalene test reliable when proper precautions are taken to collect an accurate specimen of urine per catheter. It is generally agreed among most operators that patients who, after proper drainage, show a two hour output of phthalene of less than twenty percent and whose time of appearance is more than fifteen minutes (after intravenous injection) are poor surgical risks. However, patients have been successfully operated who show an output of twelve-fifteen percent in two hours if that output is constant, showing a stable condition of the kidneys.

In preparing a prostatic for operation, his general condition, condition of his cardio-vascular system and lungs should be carefully considered along with the kidney function. An estimation of haemoglobin percentage should be made and if possible raised above sixty percent before operation is attempted. The selection of a proper anaesthetic is also important. Spinal anaesthesia seems to have few advocates. Nitrous oxide-oxygen is preferable in most cases to either chloroform or ether, inasmuch as it is less toxic, less irritating to the lungs and does not act as a heart depressant. Nitrous oxide-oxygen does not give as complete relaxation as ether and when

the enucleation is a difficult one, or the operation prolonged, ether should be resorted to.

After operation, the most common complications are hemorrhage, renal suppression and pneumonia. Due to his general condition, the prostatic does not well stand the loss of blood and hemorrhage should be carefully controlled at the time of operation. This is done in different ways by various operators. The Hagner bag is used by some, but most operators simply pack the prostatic capsule with gauze, and this, we believe serves to control the hemorrhage in practically all cases. Barringer[5] describes a method whereby the gauze packing is attached to a sponge stick, which projects through the operative wound, subsequent hemorrhage being controlled by pressure on this stick. The bladder should not be irrigated the first forty-eight hours and should the drainage tube be clogged with blood clots, just enough solution should be passed through to remove the clots. After the second day the bladder should be irrigated twice daily with warm boric acid solution.

The patient should be kept warm and dry at all times and after the first twenty-four hours turned from one side to the other and as soon as his condition permits, allowed to sit up in bed. In favorable cases he should be in a wheel chair by the end of the first week. The skin should be kept active with frequent sponging and alcohol rubs and the bowels stimulated by mild catharsis. For the first few days the diet should consist of liquid and semi-solid nourishing food

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A THOUSAND BABIES

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Read Before the West Virginia State Medical Association, Parkersburg, May, 1920.

If my memory does not err, I have never heard a paper on obstetrics since I have been a member of this Association. I have heard them on subjects that the ordinary practitioner never sees. Subjects scientifically interesting and entertaining but not of the bread-and-butter kind. I've enjoyed them and much admire the skill and patience of those who study them up and pass their knowledge on to us.

But I doubt if any one subject is of as much practical use to the whole range of medical and surgical subjects as is that of obstetrics. The gynecologist, the general surgeon, the genito-urinary man, the physician, and the specialist of every line, must have his attention constantly on pregnancy in its relation to his special work. The subject should receive greater attention than it does. "Any old thing kin ketch a baby" seems to be the spirit that many practitioners and specialists generally have toward this branch of medicine. "I don't like con-

finement work;" "I'm getting away from it as fast as I can;" "As soon as I get on my feet a little, I am going to drop it altogether." You hear this sentiment on all sides. Then when a call comes the answer will be "I can't come; get Dr. Slowpolk or Granny Jones, I am not a bit well tonight." Then the patient has to put up with whatever help she can get, and the recalcitrant doctor turns back into bed and leaves the woman to the tender mercy of her pains and the unsanitary accouchement of Dr. Slowpolk or Granny Jones.

It is true that this highly important part of the profession is the hardest work and poorest pay of any branch, but it is one that is always with us and one that deserves the closest and most conscientious attention. Yet it is one that is shunned and avoided, as if it were beneath the dignity of the physician.

I suppose the reason that papers are not read before medical meetings is that it is considered too commonplace for a scientific meeting, and that there would be little likelihood of a paper of that kind being well received by the eminent surgeons, physicians and specialists present. But we have duties to perform even if we fail to receive just recognition of what our work deserves.

Many ills of mothers and children are traceable to childbirth, and if we fail to give proper attention here we are contributing to the sum total of preventable diseases. Poor work here plays into the hands of surgeons, gynecologists, genito-urinary men, and specialists in general. Good work here abbreviates the work of these men. And I would not wish to see them put out of business, unless my work was so well done they could get nothing from my carelessness. (Yet sometimes I can't help feeling a little "bolshiviky" when I see a specialist make as much in thirty minutes as I make in thirty days).

Many times it requires as much skill in obstetric operations as it does in the most difficult operation of general surgery. Many times these emergencies arise and we are not prepared to cope with them and our patients suffer from our unpreparedness. Even in normal labors some skill is required to give mother and child proper attention. We all know this, but some of us are careless or thoughtless or wilfully negligent in doing our duty. Nature is kind to mother and child or many more would suffer from indifferent attendance. We have all been properly trained, but some of us have fallen from grace.

Once I asked a young doctor to stop at a country house and dress a sore foot. I got there too about the time he commenced dressing the sore. He had made as careful preparation to dress it as if it had been a clean surgical operation. I remarked it seemed unnecessary to be so cautious in dressing an old running sore. Note his answer: "If I am always careful, I will always be careful." That is the special point above all others in confinement work. "Always careful." I have always attempted at least decent carefulness, and have no regrets. Out of more than 1,200 confinement cases, no mother has died, and I have had no case of childbed fever.

You remember Semmelweis who was hounded to death by the eminent obstetricians of his day for advocating cleanliness in obstetrical work. But now we all do him homage when we approach a confinement case as if it were a clean major surgical operation.

Some obstetricians advocate rectal examinations and not make vaginal ones. This seems to me to be foolishness. For the contaminations of involuntary bowel

movements during labor gives one abundant experience with fecal matter without voluntary contaminations. This is certainly poor advice for routine practice.

A heavy, dense, hard, perineum often needs manual distension, especially if the pains are hard and womb dilating rapidly. A little time spent in stretching the tissues will almost invariably prevent perineal rupture. This is the duty of the obstetrician and should be followed out. He can do this instead of "settin' around and waitin'." He will prevent the tears and save time and prevent complications. "Hands off" is not proper teaching. It is good practice in certain cases to push the anaesthetic a little and pass the whole hand into the vagina and stretch the parts and the womb as well.

Digital dilation of the uterus should be routine in slow cases. It shortens labor and relieves every one. Some patients do not stand this well, but if the dilating is done during the pains, they will put up with it. If they do not stand it well, a little chloroform helps relieve the pain and relax the muscles. This artificial pain stimulator is not used as much as it should be.

All this is well known by practitioners, and it seems that it would be useless to call attention to it. But as a matter of fact many doctors "let nature take its course" and fail to add any help to perverted, weakened or deteriorated nature. Why should he go to attend a confinement case if he does not use his skill when needed? Primitive woman needed no doctor, and nature took its course. We have passed that stage, but a few doctors have not yet found it out.

The abdominal binder should be used. There are several reasons why this is so, but the principal one is the comfort given the patient. Properly applied, it gives support to the relaxed abdominal walls, holds the disjointed pelvis together, keeps the uterus from relaxing by external pressure and offers a means of pinning on a perineal pad. The clean perineal pad is one of the safeguards against post partum infection. For if the pad is not pinned on it is always getting out of place and the patient has to frequently replace it, with hands unclean, and it becomes contaminated in contact with an unclean bed.

I call attention to the binder from the fact that many doctors do not believe in them; they only put them on at the urgent request of the patient and even then often say "You can have one on if you want it," and then turn to some woman who is by to aid and say "Put one on her," and never look to see whether it is done properly or not, or whether it is done at all. Some few physicians advise the use of the binder only after the patient is out of bed. I can see no reason in this advice.

I find a tendency among some men to see how quickly they can get away from the lying-in room after the baby comes. The placenta is extracted and the baby and mother turned over to the care of the nurse or granny, and the doctor makes his getaway. This may be right in his own eyes, but he is not employed to neglect the interests of mother and babe, for the future welfare of both may be injured by carelessness or neglect the first hour after birth. The doctor who is in too big a hurry here may regret it later. It is his duty to see that all details are carried out as to baby and mother. If he has a good nurse to help him, so much the better. But if he has not, these details should be carried out by himself. Three out of four women are confined without attendance of a trained nurse. We have to put up with what we find at the home and do our

best with what we find. The greater the paucity the greater our care should be. A general practitioner in our state cannot select those who have abundance about them. I find places where the doctor bill is promptly paid, but provision for the welfare of mother and child is wickedly short, and others where abundant provision is made for the patients and none whatever for the doctor.

My list has 1,219 births. There are 21 more boys than girls. In classifying the nationality of one or more of the parents of the children I find that 97 were Italian, 31 Hungarian, 26 Austrian, 10 Welch, 10 German, 9 Greek, 6 English, 5 Roumanian, 3 Russian, 3 Asyrian, 3 Irish, 2 French, 2 Bulgarian, 2 Polish, 2 Swedish, 2 Belgian, 1 Dutch, 1 Danish, 1 Swiss and 1,007 Americans. Nine of the Americans were negroes. This is a motley aggregate, but the vast majority of Americans adds hope of proper assimilation of the cosmopolitan bunch.

There is little difference in the nationalities. Yet I believe the Hungarian women are the most vigorous and have the least trouble. They are all bodily clean and make good patients.

The Italian women as a class are the most modest, and seem to greatly appreciate being confined without exposure, more so than any other nationality, with the possible exception of Americans. They hold the doctor in a little higher esteem than any of the others. Taking it all around, the Americans are the most satisfactory. As a whole they are not as robust as the foreigners, but the satisfaction of being able to talk and reason with them is worth much to one. But we find few of them that are like the one who said when the baby came "Golly, that was no trouble! I could have another right away."

Out of the 1,219, sixty-six were born dead, or lived only a short time. A few deaths were due solely to dystocia. But I find seven are classified as positive syphilis, and eight as presumptive syphilis. Three died from prolapsed cord, two placenta previa; two maternal eclampsia; two with chin catching on the pubic bone and the womb contracting about the baby's neck. But the most of the children were premature. One little one, not over four and one-half or five months in utero, lived a minute or two and cried. The thing was so absurdly little, and period of gestation so short that its crying made an uncanny sensation run over me, never felt before.

I had twenty forceps cases. These are not so frequent since pituitary extract has come into use. There was one case of Caeserian section. The patient did well. The mother, I understand, has since given birth naturally.

I have kept no record of miscarriage cases, or abnormal presentations. I had only one face presentation, and failed to diagnose it until I saw the face. I had diagnosed it as a monstrosity from digital examination.

I found one monstrosity and two spina bifidae. One spina befidae died after five months. The other is now two months old and is rapidly developing by hydrocephalus.

There were 27 illegitimate births. Of this number, three mothers refused absolutely to give the name of the father. One girl of 16 denied knowing anything about being pregnant. One night she had hard cramps and the mother went to apply hot cloths and found the child in labor. The mother and girl both claimed this was the first they knew about it. I believed them both of course.

There were two sets of illegitimate twins. Thirteen sets all told. Two mothers had two sets.

The oldest mother was 48 and the youngest less than 15. Only one baby weighed as much as 12 pounds. I am of the opinion that the 12-pound newspaper babies have not been weighed. One little girl weighed one and a half pounds and was full term. Its mouth would not take the nipple and had to be fed with a medicine dropped. She is now 10 years old.

One of the most unique incidents in my practice occurred when a woman came into my office and wanted to engage me to attend her in confinement. I said: "How long have you been pregnant?" She answered, promptly: "A week." The boy came at the time she expected.

One baby was carried eleven and a half months. This is well authenticated. The mother's mother carried one for twelve months and her sister one eleven months.

I attended a miscarriage case and just seven months later the mother gave birth to a child that is now six years old.

In studying the birth list many pleasant and unpleasant memories come trooping up—

"Thoughts on thoughts, a countless throng,
Rushed, chasing countless thoughts along."

Many vivid recollections come thronging through the mind when one remembers the anxiety and strain and worry, when he remembers the difficult forceps cases back in the mountains. After long weary hours of working and waiting, the forceps had to be used, and no doctor or trained nurse within miles, with a malignant prejudice against the use of forceps by the accumulated grannies standing about, I went ahead and did my duty, made stronger in self confidence, by relieving the mother and melting away the prejudice about me.

Or a midnight call sixteen miles away in the fastnesses of the Alleghenies. A heavy snow storm had held the country in its grip for days but had passed away and the thermometer had dropped to twenty-six degrees below zero. Bundled in wools and furs, mounted on horseback, with lantern on arm, the start was made over ridges and hollows and unbroken roads. Ten miles from home, in crossing a stream on ice, the horse fell flat, throwing me in one direction, he going another, and the saddle bags, obstetrical kit and lantern scattered about in promiscuous confusion. I was far from a dwelling and fully realized I would have frozen to death had I been badly hurt. But luck was with me (as it always was) and I gathered up the scatterments and hurried on.

In studying the list I could remember something of every case except one. I found the record of one birth that has completely disappeared from my memory. I suppose it must have occurred sometime when I was dazed from overwork and no impression left on my mind.

About the only suffering I have had in this world has been due to sleepiness. I know little of physical pain, but I have had great distress (so it seemed to me) from wanting to sleep and had no opportunity. Most of us know a little about it at church, but that intolerable discomfort from loss of sleep and physical exhaustion are not the meed of the ordinary churchgoer. Most of you know what I am talking about. I have spent sixty

hours without rest or sleep, traveling on horseback a hundred miles during that time, changing horses five times. The physical and mental incapacity of one to attend properly to patients under these circumstances is evident. I have attempted to fix up medicine for patients, and forgot the combinations and had to throw it out and try it over. Whether or not I had ever to write a death certificate on this account I do not know. I have gotten off my horse and poured cold water down my back to wake me up (and it does it). I hope I will never learn much about physical pain, and shall never voluntarily compel myself to undergo such hardships as I have endured in the past.

In studying and pondering and dreaming over my baby list, the connecting link between the past and present, I could not help conjuring up a scene that would be unique in its appearance and entertaining, in fact. I have thought, if by any act of hocus pocus and necromancy, all these little ones could be gathered into some huge dining hall, each one in its high chair, waiting for slow nurse and tired mother to serve its breakfast, what contrasts and comparisons there would be. The robust and strong, the healthy and fat, the bright and sunny, along side the cripples and defectives, the atrophic ones of starvation, the puny, sallow, weasened, skinny, shriveled, scrawny, syphilitic, white and black, legitimate and illegitimate, each one anxious for his feed, kicking its legs and throwing its hands and all yelling at once "More stuffin'! More stuffin'!" Each one in the langauge of its parents, Greek and Bulgarian, Roumanian and Serb, Irish and Pole, Russian and Scotch, German and Dane, Belgian and Swede, English and Austrian, Italian and Welch, Swiss and Hungarian, French and Asyrian, Spanish and Turk, and the greatest squallers of them all, the AMERICANS! A regular drumfire of hunger, a bedlam of babies! This would indeed be a baby show, unparalleled in the annals of the world.

HYDATIDIFORM DEGENERATION —REPORT OF CASE

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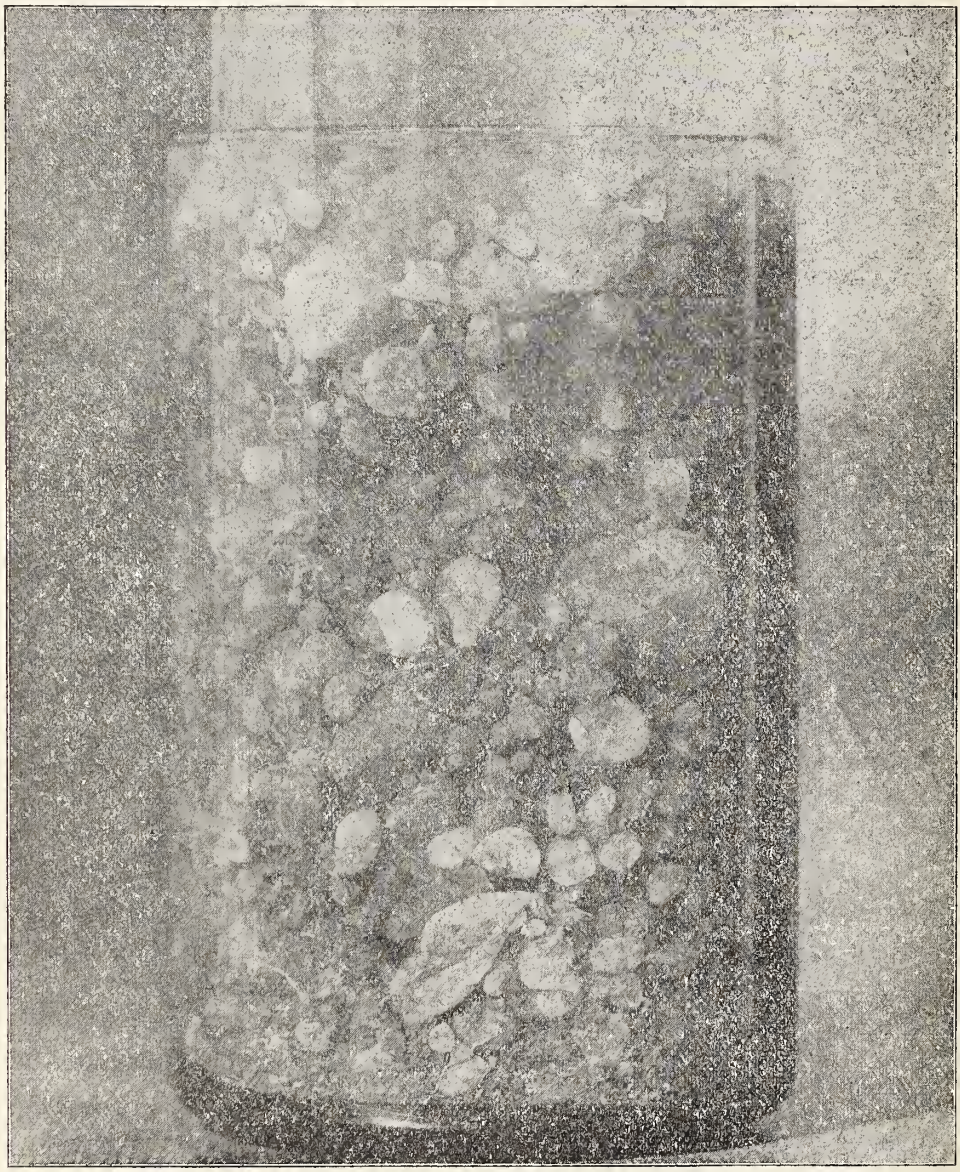
That hydatidiform degeneration (hydatidiform mole, molar pregnancy, cystic degeneration of the chorion, etc.), is a rare condition is agreed by all; that it is an extremely rare condition is the opinion of many specialists in obstetrics. Indeed many practitioners state that they have never seen a case in a large obstetric practice of a life time. Pozzi (1909) stated that in an experience with some 6,000 cases of pregnancy he had never met with a case of molar pregnancy. Williams in his book states that "Hydatidiform degeneration is a rare disease, occurring, according to Madam Boivin, but once in 20,000 pregnancies. Williamson, however, states that it occurs once in 2,400 pregnancies. DeLee states that he has frequently found in aborted ova one or more degenerated villi forming vesicles. The records of the department of Embryology of the Carnegie Institute at Washington indicate that this disease occurs with greater frequency than is commonly supposed, but these records are from the results of careful examinations of specimens in all stages of pregnancy. It is probable that the condition is common early in pregnancy and that it is very rare late. Ova abort-

ed early in pregnancy are not examined carefully as a rule and, hence, the disease is not recognized. The growth resembles a bunch of Catawba grapes, irregular in size but usually small. The vesicles hang on stems and are attached to each other. Ordinarily, all traces of the fetus and amnion have disappeared,



HYDATIDIFORM MOLE
Note Large Size of Some of Cysts.

but both may be preserved. Parts of the placenta may be intact, and a living child may be born. It is evident that the degeneration begins early in pregnancy.

The actual cause of hydatidiform degeneration is unknown. It occurs more frequently in multiparae and seems to be more common in young women, although cases have been reported in women past fifty. Frankel suggests that abnormal secretion from a diseased corpus lutum producing a diseased ovum may

be the cause. DeLee states that diseased decidua is found with these moles and rather points to abnormal endometrium as the cause. The clinical course of the disease is interesting: Pregnancy is stormy from the beginning, with nausea, vomiting and frequently numerous uterine hemorrhages and a dark colored discharge from the uterus may be present. Abortion usually occurs before the sixth month, when the expulsion of the mole is usually complete. DeLee states that death from acute anemia is not rare and it is his experience that the blood is lighter in color and the coagulation time is retarded. Infection is common with these cases. Occasionally, small purplish tumors are found in the vagina or on the vulva after the uterus has been emptied and these are supposed to be syncytioma metastases. Hydatidiform moles may favor the development of chorio-epitleliomas and, for this reason, Findley has advised that a thorough curetment be performed several weeks after the uterus has been emptied. Certainly the woman should be watched carefully and examined frequently for several months. The uterus should be removed if signs of malignancy develop.

CASE REPORT

Mrs. W. Married. Age 19. Gravida 1. Reported March 30, 1920, for obstetric attention. Family History: Uneventful. Personal History: No operations. Pneumonia following influenza two years ago. Is troubled with gas formation after meals. Began to have morning nausea two weeks ago. States that for the past two weeks she has been rather nervous and can feel heart beating violently at times. Menses: Menstruated first at 16. Regular twenty-eight day type, lasting four days. Not painful. Last period began February 10, 1920. Previous pregnancies: None. Examination: March 30, 1920. Well nourished but pale young woman. Normal stature. Height 5 feet 5 inches. No evidence of rickets. Head: Negative except a moderate diffused thyroid enlargement. Chest: Good form. Lungs negative. Heart rate 120 per minute. No murmurs. Slight accentuation of pulmonic second sound. Abdomen: Flat. Moderately thick wall of good tone. No palpable abnormalities. Extremities and Skin: Negative. Pelvic Examination: Nulliparous outlet presenting no abnormalities. Vagina is rather small. Cervix long, narrow and softened at its tip. Uterus is slightly enlarged and rather soft, especially near the fundus on the anterior surfaee. Adnexae are negative.

Pulse 120, respiration 26, temperature 98 Fahrenheit.

Urine: Negative.

Blood pressure: 100-70.

Diagnosis: Pregnancy with slight hyperthyroidism.

Treatment: Patient advised to observe plenty of rest, to lie down an hour after each meal, etc. April 20th patient reported at office complaining of rather severe nausea and vomiting during day, cardiac palpitation, weakness, etc. Looks as if she has lost weight since last visit and skin is pale. Temperature 98. Pulse 120. Blood pressure 100-60. Urine negative. Patient given 1 C. C. lutein (H. W. & D.) intramuscularly and this was followed by one ampule every third day. April 23rd, patient reported at office feeling improved as far as nausea and vomiting were concerned. Still felt weak and nervous. Pulse 110. April 26th, reported for ampoule injection still improved. Only slightly nauseated each

morning. However, was still weak and easily fatigued. Does not sleep well at night. Given 1 C. C. lutein and a prescription for sodium bromide 10 grains to be taken at bed time. Patient did not report again until May 4th, stating that she felt fairly well during the interval. At this visit, however, she complained of the same weakness, nervousness, insomnia, cardiac palpitation, etc. Patient looked ill. Temperature 98. Pulse 120. Blood pressure 100-60. Urine contained a trace of albumin. Pelvic examination reveals nothing but a uterine enlargement corresponding to the supposed pregnancy. Patient stated that she vomited after each meal. She was put to bed and given 1 C. C. lutein intramuscularly every third day. All symptoms improved while in bed and the nausea and vomiting were controlled by the injections. After a week in bed she was allowed to slowly resume her former habits. The following month her health was fairly good but the injections were required to control the vomiting and her pulse remained over 100. Patient again failed to report at office and I did not see her again until June 25th, when I was called to her residence. At this time I found that she had taken an automobile trip to a rather distant city four days before and upon her return had begun to bleed slightly from the vagina. The bleeding increased and clots were passed on June 23rd and 24th. During the evening of June 24th she had a severe chill followed by a rise in temperature to 102 F. When visited June 25th, I found her in bed complaining of severe cramps in lower portion of abdomen. Temperature 101. Pulse 128. Uterus 2 C. M. above umbilicus and very firm. This enlargement was greater than would be with a four months pregnancy and the uterus had evidently increased in size rather rapidly during the past month. Due importance, however, was not attached to this at the time. A diagnosis of infected abortion was made and the patient sent to Cook hospital immediately where she was prepared for operation.

Operation: Under nitrous oxide anesthesia the uterus was dilated with Jolly dilators and explored with a finger. The contents of the uterus felt very spongy and, now and then, during the exploration brisk bleeding occurred. I was about to tampon the lower uterine segment and vagina to await thorough dilatation and then expulsion of the uterine contents when the finger withdrew several small cystic masses resembling white grapes. The diagnosis was then clearly one of hydatiform mole and the contents of the uterus were removed as thoroughly as possible with the finger and sponge forceps. There was no fetus. The uterus was not curetted but was firmly packed with lysol gauze. Following the operation the patient's pulse rate was 130 to 140 for several hours but it gradually fell to 80. The symptoms of hyperthyroidism disappeared and in three days the patient felt perfectly normal. She gained rapidly in weight and

left the hospital on the eighth day. An examination three weeks after revealed no abnormalities.

Examination of the tissue removed from the uterus shows it to consist of degenerate decidua and many hydatids of various sizes, some loose; some fastened together. In the preserving fluid it nearly fills a liter jar as shown by the illustration. The cysts vary in size from 1 mm. to 4 cm. No fetal remnants are found.

Announcements and Communications

Editor West Virginia Medical Journal:

Dear Doctor: Apropos to your article in the West Virginia Medical Journal for November, under the caption, "What Can Be Done?" permit me to say, Amen, Ah Men! and then just a few more.

So you brought the shingles down upon your head by having nerve enough to advocate something that would be a real help. Well, my friend, you are not a modern politician.

It is a well known fact (ever since the crucifixion of the lowly Nazarene) that he who tries to do most for humanity, must meet with contumely, and criticism, as his reward.

O'Dwyer, who by his invention of the operation of intubation, was criticised severely, and even called a murderer, and finally died of a broken heart. Yet his services to humanity were beyond estimate. Many other instances might be cited, but are not necessary, since he who reads this knows all this, without being told.

Laws regulating the practice of medicine are necessary, and should be good laws; to protect the ignorant public, and this means the general public, so far as their ability to judge matters medical, is concerned. But what we do have a crying demand for is some means of protecting the public from the Chiro-Quack, the Osteo-Quack, and all other such humbugs.

It is a peculiar fact, that people of education, (even here, in the Athens of West Virginia), will support, and believe in these various quacks, even to spiritualism.

Such rot might well have been the fashion in the days of Hippocrates or Galen, but we have some little right to expect more from the people of the present day.

They should ask themselves: Why do not our first class universities turn out these men, if they really do amount to anything?

But, once upon a time, a famous showman said: "The American people like to be humbugged," and another sprite remarked, "There is one born every minute."

I believe physicians are reticent about getting after these irregulars, because

the dear public would immediately cry out persecution, and would not appreciate the fact that the honest doctor was only trying to do his best for them, and had no personal interest in the matter whatever. They could easily find proof of his sincerity, in the unselfish, and great amount of prophylactic work, in which every physician is taking an active part, every day of his life. It is a serious mistake to refer any patient to these irregulars. It lowers the standing of the physician, and gives the faker a boost. Not long since, an Osteo-Quack called me on the phone, and asked me to meet him in consultation, as he thought the party needed a surgical operation. I called him by name (as I make it a rule never to call these persons Doctor), and told him that the Medical Societies of which I was a member would not approve of my associating with him. Well, said he, I suppose I can get someone else, and he did. He was accompanied by a regular physician, who, however, is not a member of the Medical Societies.

On another occasion I was called in consultation with one of my best friends, one of the ablest physicians in the state. We went to see his patients, a widow and her daughter. Both had "flu" and in the case of the daughter, pneumonia had followed. When the physician asked concerning the medicine, the nurse replied, that Dr. Osteoquack had given orders that the medicine be stopped. The real doctor then said he would retire from the case, which he did, and in a few days the little girl died. It is my opinion, based upon over twenty years experience, that this little daughter would have recovered, had she continued to receive judicial medical treatment.

In my humble but honest opinion, this quack was responsible for that death. And earned for himself a very ugly title, which has been on the statutes since the time of Cain.

How many hundreds, yes thousands, of similar cases, are known. Who is going to shoulder the responsibility for allowing these things to go on? Somebody is responsible.

These things must make us think, but thinking is not worth very much, if there is not a little action.

These people are not injuring my work, as I am not doing general practice, and therefore, am not crying "wolf."

Your editorial was timely and good, so come again, dear Editor, the country needs you.

IRVIN HARDY, M. D.

The following are the questions given at the last examination of the West Virginia Board of Examiners for Registered Nurses:

1. Locate the diaphram? Name the nerves of sight and smell?

2. Name the organs in the abdominal cavity?

3. In the case of hemorrhage from any part of the body, would you elevate or lower the part?

4. Define: (a) Deglutition, (b) Venesection, (c) Elimination, (d) Secretion, (e) Excretion, (f) Dentition. Name some of the secretory and excretory organs?

5. Name three varieties of fracture and describe each?

6. Explain how raw vegetables may become infected by disease germs?

7. What insects are disease carriers? What diseases are caused by them?

8. Give four leading essentials in the treatment of tuberculosis?

9. What do we mean by the hygiene of pregnancy?

10. What are the principles to be used in cooking starch? Name five typical carbohydrate foods?

11. Outline the digestion of protein, carbohydrate and fat from the time it enters the mouth until it is absorbed?

12. (a) What is meant by the energy value of food? (b) What is the difference in the energy requirement of an infant, a working man and an invalid?

13. Name five important points for a nurse to remember in serving a patient's meals? What is the value of albuminous drinks? State how you would prepare one?

14. Where in the body is calcium found? Phosphorus? Iron?

15. Who was Florence Nightingale? Edith Cavell? Sir Joseph Lister? Wm. T. G. Morton?

16. When is a transfusion of blood indicated? Mention two methods? What articles would you have ready for a transfusion?

17. What would you do for a patient in convulsions? Mention three causes for convulsions in childhood?

18. Dose of apomorphine, tincture of hyoscyamus, tincture aconite, strychnia, sulphate, morphine sulphate? What would you do if a patient swallowed by mistake a bichloride tablet; a teaspoonful of carbolic acid?

19. Define cancer? Is it contagious? Hereditary? Infectious?

20. Classify the following diseases, and state whether they are caused by bacteria, protoza or unknown organisms: Diphtheria, Pneumonia, Malaria, Smallpox, Syphilis, Scarlet Fever, Measles, Cancer.

21. Define Typhoid Fever. Mention three complications? Mention at least four definite principles to be observed in nursing a Typhoid case.

22. Define lochia, meconium, placenta praevia, amniotic fluid, Caeserian Section?

23. Following an abdominal hysterectomy, what symptoms would lead you to suspect concealed hemorrhage? What would you do?

24. What is puerperal septicaemia? Name three diseases a nurse should refuse to attend prior to taking a case of Obstetrics?

25. Define Eclampsia? Mention the symptoms that would lead you to suspect Eclampsia?

The West Virginia Medical Journal

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Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

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"NURSES"

Under Editorials will be found one from Dr. Hupp dealing with this question. I am sure that if the members will read this "thinkingly" that each one will be awakened to a hearty agreement with all efforts to elevate the standard of requirement for acceptance by the various training schools throughout the state, and then a standardization of the courses of instruction to be given.

My personal opinion is that the profession of nursing is one of the greatest of all professions, rivaling that of medicine in its greatness. There should be a realization upon the part of those young ladies deciding to take up this, that it is a PROFESSION and requires hard work, a vast amount of study and a reasonable amount of preliminary educational attainment.

It is a question, in my mind, if it should be required that applicants shall be high school graduates, just as it is that a man must have a college degree before being allowed to matriculate in medicine. Some of the best physicians, the most level headed, careful and of best judgment, whom I have ever known, men who today are among the very best,

never had a high school education. So it is with nurses. But I do heartily agree that at least a grammar school education should be required.

BUT (get those capitals please) after they have been accepted the hospital which has accepted them is in honor bound compelled to give them value received in the way to training and education for the years spent. Observation leads me to believe that those in charge of training schools often do not make provision for fulfilling their part of the contract to give an especial training and education in return for three years of service.

Teaching a girl to take temperature, give a hypodermic, empty a bed-pan or urinal and keep in touch with hospital gossip, does not in my opinion make an adequate return for her time. She may be given a diploma, may get by the state board even and be allowed to use the R. N., still she is not a REAL one. AND the blame is not always hers, but the fault is with those who accepted her as a pupil nurse and have not been honest.

I have known graduate nurses who had to ask how to prepare and give a normal saline douche; of one who gave two one-thirtieth grain strychnine tablets when trying to give a dose of one-sixtieth grain.

As Dr. Hupp says, "Woulln't you like to entrust yourself to them?" But the fault lies at the door of their training school. They should never have been graduated.

MEDICAL EDUCATION FOR WEST VIRGINIANS

Up till 1902 our state left the education of her physicians entirely to schools without her borders. The state was sparsely populated, there were no large cities, the population was largely rural, the mines and factories were only beginning to be developed and the taxable wealth was small in comparison with other states. Our educational institutions were few and not up to the standard of the more progressive states. Now we are potentially and actually one of the richest states in the Union. Our school system has been improved. High schools have multiplied till there is hardly a community that does not have one accessible to her youth. The University has expanded, the Normal schools improved and Marshall college has been made a degree granting school. The denominational colleges have been improved, so that it no longer is necessary for our youth to go beyond the border of our state to get a thorough, general, technical or professional education, with the exception of those wishing to enter upon the study of medicine.

In 1902 there were five students enrolled in the Medical School. Today there are 75, an increase of 1500 percent. There would have been more but the facilities were crowded to the limit to care for these. Classes had to be doubled in order to get the students into the small laboratories. Each student is getting a careful training but the limit has been reached.

What will be done next year when the pre-medical class which numbers more than our school will hold present themselves for enrollment? Now there are thirty students from without the state. These have come without any advertisement except such as is given by students who have taken the course and have felt satisfied. Next year this number will be greater. At present there are representatives from Ohio, Pennsylvania, New

Jersey, Massachusetts, Connecticut, New York, North Carolina, Porto Rico and Siam.

Conditions are now ripe for a full four-year medical school supported by the state, where any qualified youth can get his medical education at a minimum cost and that at approximately the same as for teachers, engineers, agriculturists and lawyers. Since the state provides for the former cheerfully she must provide for her physicians also. Otherwise the profession, because of the long time of preparation and the great cost to the student will be restricted to people of means. This would result in the loss of some of the best talent and a restriction of the medical service to rural communities which even now are very meagerly served. There are places in our state where a country doctor must ride twenty miles in each direction to serve the people. Is it any wonder with our bad roads that physicians are crowding into the cities and towns?

The cost each year to a student in Medicine at the University for tuition is thirty dollars. At other schools patronized by West Virginians it ranges from $200 to $350. The living expense at Morgantown is from $600 to $800. At Cornell University, New York City, it is $1,800. It will average in any of the large cities at least $1,200.

The cost to the University last year for each medical student was $280, the average for all students $250. The cost per medical student at the University of Michigan and the University of Iowa was $1,250. The cost to the larger schools of the East is about $1,500 per student. We cannot expect to impose this burden of loss upon other states or the privately endowed schools. It has been done long enough. We must take it up and do it cheerfully.

In order to care for medical education we must have a new Medical Building which will cost at least $300,000. This has been recommended by the president of the University and endorsed by the State Medical Association. Four years ago Agriculture was provided for. Two years ago the money was appropriated for a Law Building. Engineering already has splendid quarters. Now is the turn for Medicine to get what is coming to it.

In order to secure this, the physicians of the state must use all their influence to see that the members of the Legislature from their respective counties are made fully acquainted with these facts so that we can count on their united support. J. N. S.

MEMBERSHIP AGAIN

This is just a reminder that this month must see us past that one thousand mark which was set for the 1920 membership.

It is a great pleasure to know that some of the Societies have enrolled every available man in their territory. This is fine!

Possibly Dr. Anderson will give us a list of the various component Societies together with their membership for publication in the January issue of our Journal.

Let us all make an especial effort to get every man into the Society this month.

THE EXAMINATION OF THE WEST VIRGINIA BOARD OF EXAMINERS FOR REGISTERED NURSES

At the recent examination conducted by the Board for Registered Nurses there were 37 nurses from 14 West Virginia hospitals and two from hospitals

outside of the state. Nine nurses failed to reach the 70 percent required for passing. The highest grade given was 99 9-10 percent; the lowest 48 percent.

There are two points which presented themselves, and which stood out conspicuously at the last two examinations. First, the fact that several of the hospitals are receiving young women for training who have not had sufficient preliminary education to take up the profession of nursing. Several of those taking the examinations were lamentably deficient in the fundamentals of an ordinary public school training. No matter how proficient the young woman may be in practical knowledge she should never be regularly admitted to a hospital training school until she can measure up to the standard of requirement demanded by the state law. It is not fair to these girls to receive them into a training school, and to hold them in service three long years, when you know they cannot express themselves in or spell the most ordinary Anglo-Saxon.

The second point observed by the board was that some of these pupils had received little if any class work or lectures. This is not in any way their fault, but very much to the discredit of those conducting the hospital training schools.

Think of giving a nurse R. N. who claims that Edith Cavell "was the first lady doctor," that Sir Joseph Lister was "the discoverer of listerine," that Wm. T. G. Morton performed the first Caesarean Section; that deglutition was a clear fluid in the human blood; that the diaphragm is in the upper extremity and surrounded by the heart, liver and the lungs. Would you care to trust a nurse who gives the dose of tincture of aconit root as a teaspoonful, who gives a grain of apomorphine, or who would give bicarbonate of soda to neutralize the acid in carbolic acid in a case of poisoning; who defines the hygiene of pregnancy as consisting of the uterus, vagina, ovaries and tubes, and that it requires nine months?

F. L. H.

State News

Dr. Irvin Hardy, of Morgantown, attended the Mayo Clinics at Rochester in October.

Dr. O. C. Henderson, of Lawton, has resigned his List practice at that place and located in Dayton, Ohio.

Dr. C. A. Farren, of Rupert, will take over the practice of Dr. Henderson, of Lawton.

Dr. C. A. Campbell, of Pennsylvania, will relieve Dr. C. W. Lemon, of Claremont, while he takes a vacation in the East, of two weeks.

Dr. R. L. Eltinge, of Beury, recently took the army examination at Chillicothe, Ohio.

Married, Dr. Charles Nickell Watts, of Fairmont, to Miss Zella V. Van Camp, of Paden City.

Married, Dr. Henry Grant Preston, of Fairmont, a graduate of the class of '20, University of Virginia Medical School, and at present an interne at the University of Virginia Hospital, and Miss Vera Spangler, Fritts, of Front Royal, Va.

Dr. Mazyck Ravenel, professor of preventive medicine at the University of Missouri, Columbia, Mo., was elected

president of the American Public Health Association, held at San Francisco recently.

Dr. Tom A. Williams, of Washington, has returned from an extended trip abroad. He addressed the Medico-Psychol. Association of Great Britain and Ireland at their annual meeting on the "Principles of Psychotherapy." He is located at 1746 K street, Washington, D. C.

William L. McLane, West Union, W. Va.; College of Physicians and Surgeons, Baltimore, 1878; aged 75; died in Clarksburg, W. Va., October 15.

Dr. Maxwell Barber, of Charleston, is visiting his mother after a prolonged stay in the European war zone. During the past several months Dr. Barber was with the Red Cross in Poland doing relief work among the refugees rescued from Bolshevist Russia, at Dvinsk and Lemberg.

Dr. S. C. Austin, of Charleston, has returned from a trip to Columbus.

Dr. W. S. Robertson, of Charleston, has returned from a visit to his family who are visiting near Lexington, Ky.

Dr. G. C. Robertson, of Charleston, has resumed practice after a month's vacation.

Dr. H. L. Robertson, of Charleston, has returned from a business trip in the east.

Dr. James G. Lowry, of New York, is spending a few days in Charleston, W. Va.

Dr. Robert D. Roller, Jr., of Charleston, has returned from a visit to Bridgeport, Conn.

Dr. William V. Dunlap, formerly of Sun, W. Va., has located in Charleston, W. Va.

Dr. Martin V. Godbey, of Charleston, has been elected to the state senate.

Dr. H. Lon Carter has opened a private hospital at Danville, W. Va.

The citizens of St. Albans have under consideration the erection of a small hospital for that community.

Dr. and Mrs. J. E. Coleman, of Beckley, have returned from a trip to Philadelphia.

Dr. Patrick L. Gordon has resumed the practice of eye, ear, nose and throat in Charleston.

Drs. T. E. Romine and A. A. Shawkey, of Charleston, attended the meeting of the Southern Medical Society in Louisville, Kentucky.

Dr. R. K. Buford, of Hansford, attended the meeting of the Southern Medical Society, Louisville, Kentucky.

The following West Virginia physicians were registered at the Southern Medical Association held at Louisville, Ky., November 15 to 18:

A. W. Adkins, Huntington; Oliver D. Barker, Parkersburg; J. T. Campbell, Beckley; M. R. Casey, Weston; A. M. Dearman, Reedy; Geo. B. Faber, Kenna; G. P. Fisher, Kayford; Charles M. Fleshman, Blue Sulphur Springs; P. A. Ford, Talcott; W. H. Greene, Weston; W. D.

Hereford, Huntington; Geo. D. Jeffries, Parkersburg; Donald A. Kessler, Huntington; S. B. Lawson, Logan; Roy Ben Miller, Parkersburg; Thomas W. Moore, Huntington; R. H. Pepper, Huntington; B. S. Rankin, Tunnelton; Thomas E. Romine, Charleston; James H. Rowsey, Huntington; Arthur A. Shawkey, Charleston; Stanley T. Simmons, Rockcastle; J. O. Williams, Ivaton; S. D. H. Wise, Parkersburg; A. L. Peters, Fairmont; L. L. Aultz, Charleston; James R. Bloss, Huntington; Robert K. Buford, Hansford; D. P. Crockett, Big Creek; E. B. Fittro, Salem; O. S. Gribble, Clarksburg; A. K. Kessler, Huntington; C. A. Ray, Charleston; B. O. Robinson, Parkersburg; J. G. Wilson, Martinsburg.

AWARD OF NOBEL PRIZES IN MEDICINE

The cable brings word that the Nobel prize in medicine for 1919 has been awarded to Prof. Jules Bordet of Brussels, and the 1920 prize to Prof. August Krogh of Copenhagen. Bordet's research on serology laid the foundation for the modern hemolysis tests of syphilis, the fixation or deviation of complement being his discovery. With Gengou he also discovered the bacillus in the sputum in whooping cough which may be the causative agent. Bordet was awarded the city of Paris prize of $600 at the International Medical Congress at Budapest in 1909. He is professor of bacteriology at the University of Brussels and director of the Pasteur Institute, and is now in this country. Dr. Krogh is professor of animal physiology at the University of Copenhagen. He was a pioneer in the study of the forces governing gas exchange in the lungs, carbon dioxid as a regulator in the organism, tonometric determination of dissolved gases, microscopic gas analysis, development of embryos at different temperatures, the composition and tension of the alveolar air, and other related physiologic problems. The previous recipients of the Nobel prize in medicine have been Behring, Ross, Finsen, Pawlow, Koch, Laveran, Kocher, Kossel, Gullstrand, Carrel, Richet and Barany, and two prizes were divided between Ramony Cajal and Golgi, and between Ehrlich and Metchnikoff. Carrel is the only resident of the western hemisphere to receive the prize in medicine to date. No award was made of the prize in medicine during 1915, 1916, 1917 and 1918. The prize has thus gone once to England, Russia, Italy, Spain, Switzerland, Sweden, America, Austria and Belgium, twice to Denmark, three times to France, and four times to Germany.

Dr. John L. Haddox, formerly located at Marfork, has removed to Birchton.

The first issue of the American Journal of Obstetrics and Gynecology has appeared. This publication will take the place of the American Journal of Obstetrics and Diseases of Children which discontinued publication in February.

STATE TUBERCULOSIS ASSOCIATION ELECTS OFFICERS

At the annual meeting of the West Virginia Tuberculosis Association, held in the Waldo hotel, Clarksburg, October 25, under the presidency of Dr. William W. Golden, Elkins, the following officers were elected: President, Dr. George H. Barksdale, Charleston; vice presidents, Mrs. C. O. Henry, Fairmont, Mrs. J. M. N. Downs, Buckhannon, Mrs. William Wilson, Weston, Mr. N. T. Frame, Mor-

gantown, and Drs. Ross Hunter, Huntington, and William W. Golden, Elkins, and treasurer, Mr. Ben Baer, Morgantown.

Zina Edward Dawson, Wilsonburg, W. Va., (license, West Virginia, 1881); aged 69; died at the home of his son in Shadyside, Ohio, October 24.

MEDICAL SCHOOL INCREASES STAFF

The following have been added to the staff of the School of Medicine, West Virginia University: In the department of anatomy, J. Floyd Morrow, B.S.; in the department of bacteriology and pathology, T. J. Murray, M.S., associate professor, and Raleigh L. Moler, B.S., assistant; in the department of physiology and physiologic chemistry, Dr. J. Earl Thomas, associate professor of physiology, and H. C. Van Der Heyde, D.Sc., Heemstede, Holland, assistant in physiologic chemistry; in the department of pharmacology, Dr. Cassius H. Hoffrichter, associate professor of pharmacology and physiology, and C. E. Beers, Ph.G., assistant.

Ohio-Miami medical college at its centennial celebration will pay high tribute to the memory of Dr. Christian R. Holmes, when a life-sized portrait of the noted physician will be presented to the college. Dr. Holmes devoted almost his entire professional life to the advancement of the institution. Many prominent persons will attend the celebration, including Sir Auckland Geddes, British ambassador to the United States, who will deliver the principal address at dinner at the Sinton hotel.

Dr. N. G. Champe, formerly located at Montgomery, has removed to Mammoth.

The following papers were presented at the Southern Medical Association by West Virginia physicians: Birth Trauma, Dr. W. D. Hereford, Huntington; Roentgenotherapy, Dr. R. H. Pepper, Huntington; Dr. T. W. Moore, of Huntington, Councillor of the Association opened the discussion of Dr. E. B. Cayce's paper on Primary Carcinoma of Trachea.

Dr. W. W. Strange, who has been at Sheltering Arms Hospital at Hansford for sometime, has returned to Huntington, where he is connected with Dr. J. Ross Hunter, in the practice of surgery.

Society Proceedings

October 28, 1920.

The regular meeting of the Cabell County Medical Society was called to order by the chairman at 8:30 p. m., at the Hotel Frederick. The minutes of the previous meeting were read and approved as they stood.

Dr. J. A. Guthrie reported an interesting case of hypernephroma of three years standing.

Dr. C. G. Willis, in a carefully prepared paper, presented the subject of "The Two Hours Renal Punctional Test," in a masterly manner. He called special attention to the fact that no variation from the ordinary diet nor mode of living is required, as was formerly thought; that the test is easily performed

with little apparatus, and that the test affords reliable data regarding the functional capacity of the kidneys.

There being no further business, the motion to adjourn was made and carried.

Number present, 14.

F. C. HODGES,
Secretary.

October 21, 1920.

Dear Editor Bloss:

I owe you an apology for not writing you last month that we had no Society meeting and no local news about the medical profession of interest.

The Marshall County Medical Society rendered this program on Tuesday, October 19th:

Paper—The Laity, by Dr. Joseph A Porter, of Littleton.

Toxemia, by Dr. J. J. Duffy.

Gun Shot Wounds of the Moose, by Dr. Charles G. Morgan.

Discussion opened by Dr. W. P. Bonar.

This meeting was well attended and these original papers were much enjoyed. Dr. Porter's paper brought forth much laughter while his experience with the Laity was much the same as the experience of every practicing physician. His paper at intervals reached sublime height of eloquent language and the poetry he quoted was appropriate and illustrated a point.

Dr. Duffy dealt with Toxemia in general, with special reference to the definition of the different toxemias and the classification of them.

Dr. Charles G. Morgan and Dr. W. P. Bonar told of their recent moose hunt in Canada. The doctors "poked" a good deal of fun at each other and told of each killing a moose and of Dr. Morgan wounding a bear. Their talks were very interesting and instructive and were much enjoyed by the Society.

The out of town members present were Drs. Joseph A. Porter, C. S. Fortney, Mary Fortney, and F. L. Watson. It was praiseworthy to them and encouraging to us to have them come so far to our meeting.

Dr. Leo Covert was our visitor. He was freely congratulated and warmly welcomed into the matrimonial kingdom by his fellow physicians. He was recently married to Miss Perry, the former and efficient superintendent of the Reynolds Memorial Hospital.

Dr. J. N. Ruckman, of West Liberty, paid his dues and the necessary steps were taken to have Dr. C. M. Kimble, of Paden City, become a member. We are glad to have these names to add to our list for we are anxious to have our state membership reach the thousand mark and we feel proud of the fact that Marshall County has done her full duty in accomplishing this coveted result.

May we extend through the Journal greetings to our Sister Societies and our best wishes for their growth and closer fellowship among their members.

ROBERT A. ASHWORTH,
Secretary.

Excerpts from proceedings of Monongalia County Medical Society:

Those present were Drs. Brock, Kelly, Wade, Poston, Maxwell, Wylie, Bush and Brown. No one present was under fifty. The Society is held together by the older men. The younger men do not attend except spasmodically.

A case of urticaria was reported, in which the eruption was intensely yellow. The hives soon disappeared and there developed jaundice of the entire body.

A case was reported of broncho-pneumonia in an eighteen months old baby. Its mouth and throat were covered with a pseudo membrane, cultures from which showed pure pneumococci infection.

Public health matters were discussed, and a vigorous support of the health regulations was urged, especially infectious diseases, the supply of pure milk and clean vegetables, the reporting of birth and death certificates, and a more wide-spread demand for stricter enforcement of the sanitary regulations. That doctors who fail to do this show lack of public spirit, and should be reported for remissness of duty.

It was reported that a certain chiropractor was plying his trade without license. The case was reported to the commissioner of health, who promptly instructed the prosecuting attorney to arrest the offender. Dr. Kelly, the health officer, swore out a warrant and his arrest followed. At his trial he gave bond to refrain from further imposition on the public. He soon went on a farm outside of the state, deeming farm life more congenial than the tentacles of our medical society.

A clinical case was presented that stumped the whole outfit of doctors. The case was a child 15 months old, born of apparently healthy parents, but suffering with some nervous disturbance, resembling tetany, rickets, infantile paralysis, or some other ill-defined ailment. It had typical Hutchinson teeth, and was unable to hold up its head. The cervical vertebrae seemed absent, or at least rudimentary, yet X-ray showed shadows resembling bone. The baby has been treated for weeks for syphilis in a Pittsburg hospital, with no benefit whatever. The Hutchinson teeth seemed to be the only inference that the child is a syphilitic, except a general unaccountable condition in which one's inability to make a diagnosis gives him an opportunity to saddle his ignorance onto the back of old Granddaddy Lones. This is doubly true, as Wassermann reaction was negative in the child and both parents, and there are several brothers and sisters in perfect health.

The membership of the Society is the most in its history, yet many of the members rarely are present, preferring to "make money" to helping keep the Society in a high state of efficiency by contributing their share to its general welfare. Some won't attend because others do. Some are "too busy." Some are too lazy. So our Society lacks in many things, but it keeps right on with a hundred meetings a year.

This letter is made of quotations from the minutes of the meetings, except the last paragraph. There are hundreds of others equally as interesting. If this meets the editor's approval, others may be sent.

C. H. MAXWELL,
Secretary.

Medicine

RHEUMATISMAL CARDIOPATHIES

In rheumatismal attacks in cardiopathies salicylate of sodium should be administered. The physician must act quickly and energetically. A purgative should be first given, after which the sodium salt should be exhibited at the daily dose of from six to eight grams for several days. This dose is then decreased, but it should be maintained at four grams for some time and then reduced to three, then to two grams and finally it can be stopped. In children about fifty cgm. of the sodium salt should be given daily for each year of age up to

six years, but from six to fifteen years three grams daily may be given for some time and then gradually decreased.

Sodium salicylate should be given in the form of a potion in several doses a day and it should invariably be combined with sodium bicarbonate as follows:

Sodii salicylat	15 gm.
Sodii bicarb.	10 gm.
Syr. cort. aurant	50 c. c.
Aq. dest	250 c. c.

Each soupspoonful contains about one gm. of the salicylate. By the addition of the bicarbonate the phenomena of gastric intolerance are avoided, so that the exhibition of the drug can be continued without any setbacks.

Treatment with sodium salicylate is usually employed with too much timidity, in small doses and for an insufficient length of time, and the failures with this treatment have been from no other cause. —Ex.

ACUTE SYPHILIS OF THE KIDNEY

Cole (*The American Journal of Syphilis*) states that acute syphilis of the kidney is a rare disease. A patient taking mercury is apt to develop nephritis due to the drug which may be misleading. Nevertheless, he reports a case in which all sources of error of diagnosis have been excluded. Apparently the most characteristic symptom is the enormous amount of albumin in the urine, up to 50 or 100 grams per liter without hyaline casts. Quoting from de Dieulafoy he says: "As regards the pathological anatomy of the disorder, this form is an acute parenchymatous nephritis. The tubuli contorti are the parts most affected and Henle's epithelium undergoes fatty granular degeneration. There is usually no glomerulitis."

The disease is often fatal.

The therapy consists in milk diet and small doses of mercury or mercury rubs. In accord with other authors, the most efficacious drug is arsphenamin in small doses; mercury causing in the case reported salivation after one week, with steadily increasing amounts of albumin in the urine.

Surgery

TECHNIC OF ANORECTAL OPERATIONS UNDER LOCAL ANESTESIA AND RECTAL INSTRUMENTATION

Dr. Samuel G. Gant, of New York, said that it was possible under local anesthesia to perform an appendectomy or a colostomy or to do work on the sigmoid, but he did not employ local anesthesia for operations of that kind unless a patient could not take a general anesthetic. He regularly did all his rectal work under local anesthesia, using one-eighth of one per cent eucaine. The eucaine kept indefinitely and was effective. The injections should be given intradermally. Eucaine was preferable to quinine and urea, which sometimes caused sloughing and induration. In removing thrombotic hemorrhoids he merely turned out the clot and did not put in sutures. If sutures were used, a drain should be employed. After removing thrombotic hemorrhoids, it was a mistake to tell the patient that he would have no further trouble. Local anesthesia was not desirable in operating on deep fistulas, or in any operation in which the surgeon did not know the extent of the operation before he started to operate. In operating for anal polyps, fissures, ulcers, or external or internal hemorrhoids, he

always used local anesthesia. It was an advantage to have a large needle and a copious syringe. There was very little hemorrhage in operations performed under eucaine anesthesia. Cocaine should never be used, and adrenalin was not to be recommended because it first contracted the blood vessels, and when the patients relapsed secondary hemorrhage might follow. A motion picture showed the removal of an enormous adenoma with the patient under local anesthesia; this had necessitated keeping the patient in the hospital over only one night. He never divulsed the sphincter in cases of ulcer or fissure. Under local anesthesia a hemorrhoid operation should be performed in five minutes and a fissure operation in two minutes. In employing the clamp and cautery method in operating on hemorrhoids, one was likely to have a stricture if too much skin was removed. He had seen five hundred strictures following the Whitehead operation. Doctor Gant also demonstrated his method of operating for the relief of pruritis ani under local anesthesia. He made four buttonhole incisions and by scissors dissection under the skin cut off the nerves around the itching area. Hemorrhage never occurred when this form of local anesthesia was properly employed. He believed that ninety-five percent of hemorrhages following operation were due to the ether, which caused vomiting and straining. In operating for pruritis ani he gave morphine about half an hour before the operation and again about fifteen minutes afterward. A picture illustrating the speaker's method of introducing the proctoscope and of Gant's valvotomy clamp formed part of the demonstration. Doctor Gant said further that the results of this operation for pruritus ani were not always permanent unless the original cause was removed. He did not get infection with eucaine anesthesia and he did not use elaborate precautions for sterilization. The necessary preparations took about five minutes. He thought the secret of his success was a large operation and free drainage. In doing the clamp and cautery operation he had had hemorrhages ten times and did not do it any longer. The application of carbolic acid and iodine had no effect on the subcutaneous tissues. As for sacral anesthesia, it took longer and one had to be very careful to insert the needle at just the right point.—Ex.

THE PATHOLOGY AND TREATMENT OF CHRONIC OSTEOMYELITIS IN UNHEALED WAR WOUNDS

Goodman, R. (*Therap. Gaz.* 1920, xliv, 94). In the author's opinion the infection of war wounds is more lasting than that of wounds received in civil life and therefore requires longer after-treatment.

Traumatic osteomyelitis resembles the spontaneous osteomyelitis of childhood. While in civil life acute diffuse osteomyelitis rarely follows compound fractures treated by careful surgery, in war wounds complications are frequent because of the extent and severity of the bone lesion, infection, and the hasty first-aid treatment.

Goodman advises against the use of gauze drains in osteomyelitis and does not believe that heliotherapy is of any therapeutic value in such cases. The only treatment is operation at the proper time. The cavity must be obliterated by wide removal of bone to allow the neighboring tissues to fall in. The removal of a joint should be avoided if possible as an ankylosed joint is better than a flail joint.

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THE PRE-OPERATIVE LOCALIZATION OF THE ACUTE APPENDIX

By Robert J. Reed, M. D.,
Wheeling, W. Va.

Read at the Annual Meeting of the West Virginia State Medical Association, Parkersburg, May, 1920.

The puzzle fascination takes hold on life in childhood and is lost by few even as the years lengthen. Everyone finds interest and diversion in a good puzzle. The precise position of the appendix is always a puzzle, and it would seem but the following of this natural instinct, to invariably make the effort to figure out its location before seeking for it surgically.

Is it worth while to know approximately its position prior to operation, and is this knowledge possible? In dealing with a sharply acute appendix, its imminent rupture always excites a fear which impels immediate action and prevents the careful surgeon, in the small hours of the night, already laboring under the weight of physical fatigue and mental fag, from accepting the alluring, satanic suggestion of "waiting till morning." His conscience bids him act at once lest general infection occurs. But what profiteth this prudent judgment if in an operative procedure, though timely, an awkward and unskillful delivery of the necrotic organ results in scattering infection and starting a conflagration. To seek a direct approach to an appendix presumably necrotic and to aim to deliver it by the shortest route and under the guidance of the eye, are efforts obviously worthy of our serious consideration.

Innumerable abdominal incisions have been recommended in appendectomies. In fact in our own West Virginia Journal in its recent issues, a new one has been appearing every month. All of the so-called new incisions are but modifications of the McBurney, or the right-rectus incisions. Their originators strongly advocate the adoption of their technique in every appendix operation. Each particular one has its merits doubtless and there is no disposition to engage in criticism of any method of procedure.

The contention is that no one incision is applicable in every case, but that the manner and point of approach should be determined by the position of the inflammed appendix in each individual instance, and the aim should be to make the incision as nearly directly over the appendix as is feasible. The McBurney incision or any modification of it is clearly not suitable if a gangrenous appendix is lying deep in the pelvis. Extricating it from its environments would of necessity be done bindly, guided by sense of touch largely and at a distance so remote from the abdominal incision as to make protection of the peritoneal cavity very imperfect. The right rectus incision or its modifications is also remote from an appendix situated under and to the outer side of the caecum. In either instance the peritoneal cavity is more certainly exposed to the menace of infection by this indirect approach to the seat of danger than would be true in a direct method; and moreover, in the latter, drainage, if required, can be more satisfactorily established.

In brief there are two reasons for seeking direct access to an acute appendix—to limit the area of possible infection in the process of its delivery and to establish the shortest and most direct drainage route, when this is needed.

Clearly it is worth while to attempt, before operation, to locate an acute appendix.

In this attempt it must be remembered that this frequently offending organ is found in four different positions. To quote an acknowledged authority, "Forty percent of all appendices are given off by the caecum at a point corresponding to its inner and posterior wall and lie hidden behind the illeo-caecal junction. Thirty percent ascend vertically behind or lateral to the caecum and are attached to its dorsal wall. Twenty percent are found in the low pelvic position, the true pelvic appendices and the remaining ten percent take the inward position and lie along the brim of the pelvis." Eighty percent are therefore somewhat superficial and are subject in large degree to investigation by the method of palpitation. The study of the remaining twenty percent is conducted with greater difficulty because of their position deep in the pelvis and remote from the abdominal wall.

On striving to determine which position a particular appendix occupies we seek of course first, the point of maximum tenderness. This usually indicates the base of the appendix at its point of union with the caecum. The next question of interest is the direction in which the tenderness radiates from this point of greatest sensitiveness. This unquestionably corresponds to the direction in which the body of the appendix inclines. The third matter of importance is that of muscular rigidity. It is known to be most marked over the area in which the inflammation is most active, and in appendicitis this is of course in the appendix itself, or along its immediate course.

In the presence of an attack of acute appendicitis, the diagnosis being confirmed by the history and the usual symptoms and signs, one is in readiness to attempt to decipher the problem of localization if he keeps in mind the three conditions given: the point of maximum tenderness; the direction in which the tenderness from this point radiates; the area in which the muscular rigidity is greatest; and will also hold in mind the four positions in which the appendix is found—posterior or to the outer side of caecum; posterior and to the inner side, along the brim of the pelvis, and in the pelvis. When the appendix lies behind

or lateral to the eaeeum, the maximum tenderness will be found at or near McBurney's point, shading off in an upward direetion and possibly backward toward the crest of the illum, even to the lumbar region. With the appendix in this position, it is in elose proximity to the fascia of the psoas muscle, and marked diseomfort may be elieited, if the patient will hold the right limb rigid and partially flexed upon the body. Making tense this muscle and fascia, produces pressure upon the inflammed appendix, as well as traction, if there be adhesions, aggravating the pain. This familiar test is more likely to be positive in this location of the appendix than in its other positions and relations, and aids in eonfirming the suspicion with respeet to the presenee of the baekward or lateral type. Museular rigidity will be more distinet above the line, between the spinous process and the umbilicus, than below and will be noted in the muscles lying within the crest of the illum, and in the long retroflexed appendix, the muscles of the lumbar region will also show rigidity.

When the appendix rests in a position eorresponding to the posterior and inner wall of the caeeum, the point of maximum tenderness will be, as in the other group, at or near McBurney's point, but will radiate in an upward direction, move nearly vertical, and parallel to thte edge of the rectus muscle. The musele symptom will be found in a eorresponding position, and the right reetus itself may be in a state of tension. In both positions the MeBurney ineision makes a favorable approaeh. In the first position, it should be made within one and a half ineh of the superior spine, and in the second, about half way from that proess to the umbilieus.

When the appendix lies along the brim of the pelvis, the tenderness is most marked at a point on the interspinous line, where a line from McBurney's point to the right pubic spine, bisects it, and the tenderness will radiate in an inward direction along the interspinous line. The right reetus musele in the vieinity of this line will manifest rigidity.

With respeet to the pelvic type of appendicitis there is always mueh obscurity. Its symptomatology is atypieal. And in the effort to determine if the appendix is located in the pelvis, certain diffieulties are encountered because of its remoteness from the abdominal wall, making palpitation difficult; yet much can be ascertained by a careful local and general examination. By deep palpation a point of maximum tenderness ean usually be found on a line running from MeBurney's point to the right pubic spine, one-half to one inch below its interseetion of the interspinous line.

Some measure of tenderness is also perceptible in a downward direetion toward the right pubis. Musele rigidity is not marked and may not be at all appreciable. A vaginal examination will aid materially in reaching a deeision as to the appendix's presenee in the pelvis, and a rectal examination is of importanee in the male. Vesieal tenesmus is not infrequently a symptom and always excites the suspicion of inflammatory adhesions between appendix and bladder.

When satisfied that the appendix is in the pelvis, it ean be dealt with through no ineision so satisfactorily as one through the right rectus muscle or along its outer margin. This is capable of extension downward to the ramus of the pubis if neeessary, giving good exposure and if an abseess, good drainage. The

same rectus incision is practicable when the appendix is located along the pelvic brim.

The writer is aware, that in many cases of acute appendix especially those seen late, confusion exists, landmarks are lost and localization is not possible. But why not at least make the effort. It requires but little expenditure of time, conditions are not made worse by failure, better surgery follows success, and with it goes the sense of very keen satisfaction that one always feels when he has "worked the puzzle."

A PLEA FOR THE NORMAL APPENDIX; ITS PHYSIOLOGY AS VIEWED FROM A SURGICAL POINT

By HUGH G. NICHOLSON, M. D.,
Charleston, W. Va.

Read at Annual Meeting West Virginia Medical Association, Parkersburg, May, 1920.

The object of my paper is not to renew that old discussion of whether or not appendicitis is a medical or a surgical disease; for no one believes more fully than I that a correct diagnosis of appendicitis is all that is necessary to demand its removal. I do however wish to impress upon you that there is such a thing as the normal appendix and that it has a function. In demonstrating this fact I shall use material culled largely from books of everyday use that you all have in your libraries.

Physiology teaches us that the tonsils are made up of nodules of adenoid or lymphoid tissue and numerous mucous glands; and that in deglutition the viscid secretion which exudes from them serves to lubricate the bolus of food as it passes in the second part of the act. We are also taught that in no other part of the intestinal tract except the appendix is there so much adenoid tissue. The construction of its mucous coat being much the same as that of the tonsil. A transverse section showing normal tubular glands, or crypts of Lieberkuhn and lymphatic follicles lying between the glands. It is estimated by Kelly and Hurdon that the normal appendix has about 25,000 of these glands, extending inward to the full depth of the mucosa. The lymph follicles of the appendix are visible upon the surface of the mucous membrane as smooth spaces lying in the center of the concentrically arranged openings of the crypts of Lieberkuhn. Of course surrounding the mucous coat are the sub-mucous and the two layers of muscular tissue in the same relationship as in the intestine proper. Now is it reasonable to suppose that if the function of the tonsil is to lubricate the bolus of food in passing, that an organ beginning to form as early as the sixth to the eighth week of foetal life, in length about one-twentieth that of the intestinal tract and containing 25,000 secreting glands is there without a purpose. Gant speaks of the appendix "becoming frequently inflamed as a result of constipation and fecal impaction; and, conversely, when it becomes diseased itself may become the cause of costiveness." Adami and McCrae speaks as follows:

"It is usual to regard the appendix as a useless rudiment, basing this view upon its great variation in size. To this view we can not agree; complete absence is as rare as is complete absence of the stomach, and that organ also exhibits marked variation in size. No one, however, suggests that the stomach is a useless and disappearing organ. Rather,

we cannot but be impressed by the hydrostatic relationships of the large gut in man, an erect animal.

"The fluid contents of the ilium pour into the caecum and there, and in the ascending colon, undergo inspissation prior to discharge per anam. In other words, the cecum and ascending colon have physiologically to undergo great variation in the volume of their contents. It would be to the detriment of their function were they to be acutely susceptible to pressure changes, were they to undergo peristalsis and void their contents immediately they became filled from the ileum. We must regard them thus as, in the normal state, distinctly unresponsive to pressure effects. It is the appendix, we hold, that is the hydrostatic agent initialling peristaltis in the large gut. In it we have a narrow tube, with no such pronounced variation in calibre, so situated that the weight of the column of forming feces is communicated to it, and we presume that when this weight reaches a certain point, the distending force acting upon its walls originates muscular contractions which spread directly into the cecum and so initiate the forward movement of their contents. Such a view explains the tendency to constipation in the bedridden, in whom this gravitational influence of the contents of the ascending colon can have little effect; it explains the normal tendency to empty the bowels, either shortly after rising and assuming the erect position or after the first meal when stimulating peristalsis of the small bowel has driven extra contents into the cecum and so increased the load; it explains the constipation that follows some interval removals of the appendix."

Adami and MacCrae also speak of appendical constipation through lack of initiation of colonic peristalsis either from inflammation or other obliteration of the lumen of the appendix or operative removal of the same. Cannon and Murphy have shown that even gentle manipulation of the bowel causes cessation of all intestinal movements for three hours or more. The condition might be described as intestinal shock. It is of great surgical importance. Arrest of peristalsis, quite apart from peritonitis, occasionally follows strangulated hernia, even after successful operation. Sir Arbuthnot Lane describes a condition, and demonstrated by skiagraphy by Jordan, in which the lower end of the ileum is kinked. This is one of the causes of chronic intestinal stasis. Short in his "Newer Physiology" speaks of another cause as being adhesions round the appendix, which he says perhaps leads to prolonged contraction of the ileo-caecal sphincter; at least in these cases there is delay in the small intestines. I contend that this delay is due to lack of function of the diseased or absent mucous lining; the adhesions indicating that we have had a previous attack of appendicitis with destruction of tissue.

The movements of the intestines are to a certain extent excited by a hormone produced after meals in the gastric mucosa, extracts of which given by intravenous injection, during digestion, will excite peristalsis. Would it be far fetched to imagine an hormone produced by the appendiceal mucosa and aiding in persistalsis from there on?

Many years ago we were taught to first treat appendicitis, and if an abscess cavity formed to drain the same, leaving in the diseased appendix. Some years ago, among other cases so treated, I had two cases demanding later operation, and presenting such a condition at this second operation, that I have never forgotten them. They each had a walled off

cavity which was filled with an odorless substance of the color and consistency of glycerite of tragacanth, with a little stub of an appendix with open end pointing into the sac, indicating to my mind that this substance was the secretion of the normal appendix. Now, if there ever was an ideal lubricant this substance was, and in thinking about it later my idea is that the function of the appendix, located just where it is at the tip of the caecum, is to secrete this lubricant (nature's liquid petrolatum) to aid peristalsis in the passage of the now hardening feces.

MacEwen and Keatley deprecate the present tendency to remove the appendix unless absolutely necessary to save life, believing that its removal leads to constipation and other colonic diseases. Keatley even going so far as to split the appendix, and remove fecal enteroliths, pus, etc., and close the remains of the appendix in the abdominal wall. I am not quite so radical as that, but I do think the *normal* appendix should be left in. The time to examine it also is when we first open the abdomen. A few seconds after the opening is made, owing to the absence of CO_2 all peristalsis stops and ten minutes of this is enough to make a normal appendix appear congested.

True the patient can get along without the appendix. Results have shown they can get along without the cecum, the ascending, transverse and descending colon; but because they might given later trouble is no reason for their removal. I do say this: the normal appendix helps to prevent constipation, and whether it does so as suggested by Adami and McCrae starting the peristaltic wave or lubricating as suggested by me is immaterial; leave it in.

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Etc., etc., etc.

THE TWO HOUR TEST FOR RENAL FUNCTION

By C. G. WILLIS, M. D.,
Huntington, W. Va.

Read Before Cabell County Medical Society, November, 1920.

About 1914 considerable interest was stimulated in the power of the kidneys to concentrate the urine at various levels. The workers in this line, notably Hedinger, Schlayer and later Mosenthal, showed that by collecting the urine at two hour intervals in the day, and a single specimen at night, and taking the specific gravity, volume and content of salt and nitrogen, much valuable information could be gained. In carrying out this test these men gave a fixed diet for several days, later the diet was simplified, lasting only one day. Further investigation showed that it made little difference as to the accuracy of the test, if the diet be normal, or that taken by the individual in his daily walk of life.

The test is conducted in the following manner:

The patient eats and drinks what he is accustomed to take, but takes no food or drink between meals. He has breakfast at 8, lunch at 1, and supper at 7. At 8 a. m. he voids urine and discards it. At 10 a. m., 12 Noon, 2, 4, 7 and 10 p. m. and 8 a. m. he voids and places the urine

in bottles, each properly labeled as to time. The above hours are probably the ones most generally satisfactory, but they can be varied to suit the case. It is necessary, however, to follow the rules closely as to time of collecting the urine and taking of food. But it is not necessary to follow the practice of giving an accurate known diet there by dispensing with much work of weighing the food and measuring the fluid. Any variation in his diet from his regular food should not occur. This makes the test easily applied to ambulatory cases and a patient may even follow his daily routine life.

After the specimens are all collected, the specific gravity and volume are taken in the usual way. The chlorids and nitrogen may be determined in the day and night specimen or in the mixed 24-hour specimen. We will not go into the details of the test for these two products here, but we might say that the Volhardts method for the chlorids give good results. The hypobromite method for the determination of the urea and the result divided by the factor 2.14 which reduces the urea to nitrogen, gives data accurate enough for all purposes.

After doing this we have gained some facts, which if properly interpreted may be of great value in regulating the habits and diet of the patient. The following points are of interest in reading this test:

VOLUME OF URINE

According to the method, the Night Urine in a normal person may be as high as 750 c. c. This much, however, is suspicious of renal insufficiency. If it is as low as 400 c. c. there is no indication of renal impairment. If above 750 c. c. the kidney function is impaired, and they are unable to concentrate to such an extent that the night may be a period of comparative rest for these organs. The three hour period elapsing between supper and the collection of the last specimen at ten should be enough time for normal kidneys to get rid of most of the waste material resulting from the digestion of the protein and salts. (The fats and carbohydrats are handled by other routes.) In other words these people are taking an amount of food the end products from which their kidneys must eliminate by working overtime. The increased night urine is present not only because there is a residue of solid material to be excreted, but because the kidneys have lost the power to concentrate at higher levels. This increase in night urine is usually one of the first manifestations of renal insufficiency, and is probably a very fortunate compensatory phenomenon which aids the nephritic in getting rid of waste products. It is also a danger signal. We must remember that the condition of polyurea may be met with in other diseases than nephritis, such as cystitis, pyelitis, hypertrophied prostate, elimination of odema, diabetes, severe anemia, and polycystic kidney. In most instances, however, other than those above named this condition of nocturnal polyurea can be set aside or materially diminished by a diet low in protein. It is a fact that the kidneys may carry away large amounts of fluid for considerable time, but they are apt to become fatigued and finally fall in their output. The volume of Day Urine should be around 1,100 to 1,200 c. c. This varies markedly according to temperature of surrounding air, degree of exercise, nervous strain or excitement, and character of food. For these reasons it

is easily seen that we may learn many more facts, that are of interest to us from the night specimen.

SPECIFIC GRAVITY

There are only two conditions which have a urine with high specific gravity in which the kidneys' activity may be impaired. These are Passive Congestion, and acute, sub-acute, or chronic diffused nephritis, (Mosenthal). The ability of the kidneys to concentrate is a very essential part of their function. There should be some reserve working capacity which can be used to handle all waste products quickly, causing the specific gravity to vary. The variation should be at least nine points in 14 hours. With a normal person, a specific gravity of about 1,020 will be present in one of the specimens. A casual specimen voided at any time having a specific gravity above 1,020 may be considered a good indication of normal kidney function. However, if this were low it would be no indication of impaired function, unless it were persistently so, and there is no better way to determine this than by taking the specific gravity of the seven voidings in the 24 hours. If it were possible to get a single specimen with high specific gravity, I believe we would learn quite a good deal. If, however, the urine remained at a high fixed specific gravity it is probable there is a strain on the organs requiring moisture for the performance of their function. In this case we will have clinical symptoms denoting same, such as burning on urination, furred tongue, constipation, and dry mouth. A condition usually accompanying any fever.

A low fixed specific gravity is seen in diabetes insipidus, chronic nephritis, severe anemia, elimination of odema, cystitis, prostatic hypertrophy, paralysis of the bladder, urethral stricture. As before stated the power of the kidneys to functionate in these conditions depends upon the compensatory polyurea. It is needless to say that a low fixed specific gravity is a danger signal and its cause must be ferreted out.

EXCRETION OF NITROGEN

There should be about 5 to 6 grams of nitrogen excreted in 24 hours as a minimum. This may be varied by changing the diet. In all cases of nephritis the patient should be watched continually to see that his health and strength are maintained by a proper diet, and not one too low in protein, as the resulting anemia may be worse than the disease. I believe that this test with the patient on his regular diet gives us a fairly accurate idea of his ability to handle his protein food. To go into this further would take us into the realm of blood chemistry which is beyond the limits of this paper.

SODIUM CHLORIDE EXCRETION

A polyurea is often caused by the intake and elimination of too much salt. This test enables us to judge the amount that can be taken without trouble. The amount excreted by normal kidneys is about 6 to 7 grams. It is often the habit of individuals to take large quantities of salt, and unless questioned closely we do not get this fact. In certain cases of nephritis we may cause an odema by the ingestion of too much salt, and by diminishing this intake we may eliminate the odema. This is a test in itself, but it induces a strain on the kidneys and I do not believe it will ever be largely used for this reason.

This test furnishes a fairly accurate knowledge of the working capacity of the kidney. It is easily handled by the average physician. If we care to make it still more simple we may dispense with the determination of the nitrogen and

sodium chloride and still gain a great deal of information. It is capable of adjustment to suit the case, so as not to interfere with his daily routine, and may even be more accurate if followed in this line. However I do not think it should stand in the way of a more thorough study of nephritis by the determination of retension products in the blood.

REPORT OF A CASE OF VAGINAL SEPTUM AND BICORNATE UTERUS

By H. G. STEELE, M. D.,
Bluefield, W. Va.

Read at the Annual Meeting of the West Virginia State Medical Association, Parkersburg, May, 1920.

About 11:30 o'clock p. m., on March 7, 1920, I was called to see Mrs. C. E. N., Union Street, Bluefield, West Virginia, who had been wasting for thirteen days. She is eighteen years of age, and has been married since October, 1919.

On arrival I found her in bed, suffering with slight pains, and wasting a little, with evidence of having considerable uterine haemorrhage since three o'clock that day.

I made up a strong solution of lysol in a wash bowl and immersed a few instruments and a pair of rubber gloves, preparatory to making a bimanual examination and packing the vagina if necessary.

On examination a bloody discharge was seen in and about the vaginal orifice. This was mopped away and the area made reasonably sterile with pledgets of cotton saturated with lysol solution. On attempting to insert two fingers into the vagina I met with an obstruction a short distance from the entrance and found that only one finger could be introduced as far as the cervix without some unpleasantness to the patient. This caused me to wonder how it were possible for this woman to become pregnant through so small an opening. On withdrawing my finger and reinserting it into the vagina I found more room than before, sufficient for the insertion of two fingers, and did insert two fingers, up to the cervix. This aroused my curiosity and upon closer examination I found what appeared to be to be two vaginas leading up to two cervices, or a double cervix-uteri, with an orifice opening into each vagina. This partition in the vagina was attached to the anterior and posterior walls, and it seemed to be joined to a septum of the cervices. The uterus was found to be slightly enlarged.

The patient gave a history of having missed two previous menstrual periods. I packed the vaginas — the right with two pledgets of gauze, the left with one —after stretching both slightly. She was given a hypodermic of morphine sulphate, gr. ¼, and atropine sulphate, gr. 1-150, at twelve o'clock, and I left her for the night.

At noon the next day she was brought to Mountain View Hospital and put to bed. At 1:30 that afternoon the gauze was removed. On the gauze from the right side there was a bloody discharge, but none on the one from the left, leading me to believe there were two distinct openings in the cervix and a complete septum in the middle of the vagina.

She slept most of the afternoon and was resting comfortably when I left the hospital at ten o'clock that night. At 1:30 the next morning the night nurse called me over the phone and said Mrs. N—— was having a haemorrhage. A

hypodermic of morphine sulphate, gr. ¼, and atropine sulphate, gr. 1-150, was ordered. She rested very well the remainder of the night and the haemorrhage almost ceased.

At 10:30 the morning of March 9th she was put on the operating table and an anesthetic given. On examination the septum was put on the stretch and found to be 6 cm. long and 3 cm. wide, or the latter was the distance from the anterior to the posterior wall of the vagina when well dilated, and this septum was from 3 to 5 mm. thick.

The cervix was pulled down with vulsellum forceps until it could be seen in the left vaginal fornix. The cervix was dilated and the uterus curetted with the index finger, then with a dull curette, removing the remains of about one and one-half to two months placenta from the right side of the uterus. On further examination an opening about 1.5 cm. from the external os was found leading into the fundus on the left side of the uterus for a distance of about 6 cm., while the depth of the right or pregnant side was about 10 cm., proving that I was dealing with a bicornate uterus. At this period of the operation I discovered the upper border of the septum was not attached to the uterus and that she had but one cervix, or possibly I had converted two cervices into one, at the time of dilatation.

The right cornu was mopped out with a strip of gauze saturated with equal parts of tincture of iodine and alcohol.

The septum was clamped at the junction of the posterior and anterior vaginal walls and cut away between the clamps. The stumps of the septum and the vaginal walls were painted with iodine-alcohol solution and the vagina packed with a strip of gauze.

The right side of this septum was covered with a smooth soft cartilagenous tissue, while the left side was covered with convoluted vaginal mucous membrane.

The clamps were left on the stumps of the septum, gauze was wrapped around the handles, and the patient put to bed. At 7:40 p. m. that same day the clamps were removed. No bleeding followed. At 8:20 p. m. 500 c. c. of urine was withdrawn by catheterization. The gauze was removed the next day.

Deformities: She does not seem to have any other deformity except a ptosis of the right eyelid. She never had but very little vision in this eye. She made an uneventful recovery, and left the hospital on March 15th.

I saw her on April 23, 1920, and she was feeling fine.

PAPER READ BEFORE THE EASTERN PANHANDLE MEDICAL SOCIETY

By WM. NEILL, M. D.,
Charles Town, W. Va.

Peccavi—I have sinned, that is like others I have made mistakes.

"Good nature and good sense must also join, to err is human—to forgive divine." It is said that in the old Pagan days when mortals were guilty of transgressions of the laws of the gods, that they would hasten to some shrine (the most noted of which the Oracle of Delphi) and prostrating themselves would cry "Peccavi, Peccavi." If their sins were forgiven some sign would be given and they would go away satisfied and comforted.

There is a misty legend that comes down to us from the old Mythological days, that runs something like this:

A party of young men and demigods were returning from a festival to Mars and Bacchus jollily humming the then popular ode:

Hail Bacchus of the purple vine,
We kneel before thy Sacred Shrine,
We worship thee, the noble son
Of Jupiter and Semele.

Hail Bacchus, God of Revelery,
So full of jest and jollity;
We kneel to thee, we cry to thee,
We worship thee with melody.

Bacchantes wild adore thy name,
Gay maidens dance and sing thy fame,
All nature doth thy praise proclaim,
O God of mirth and glee.

While engaged in their merry melody they thoughtlessly mutilated some of the sacred images along the way. This was considered a most flagrant and heinous crime, often punishable by death.

A wood nymph appeared and pointed an accusing finger at the startled youths. She relented, however, when she perceived the unusual beauty and grace of the offenders and observing the crowns of laurels on their heads, bade them go to the Shrine of Jupiter (the Omnipotent), confess their sins and be forgiven.

Thanking the spritely nymph for her kindness they went at once to the shrine, where they prostrated themselves, each one crying "Peccavi, Peccavi." At first Jupiter displayed his anger by peals of thunder and flashes of lightning. Then Appollo appeared, (Appollo whose mighty breast forever pours out love, light and life) spread his protecting wings over them, and by his eloquence in their behalf, Jupiter relented and they were forgiven.

One of these youths was Appollo's son Aesculapius, the young god, who later became so famous as a physician that when he restored so many to live that Pluto complained to Jupiter, who struck Aesculapius with thunder. Since then he has always been looked upon as one of the fathers of medicine.

Why now in these modern times cannot we (the descendants of his craft) go to one another and do as he did, not only saying "Peccavi" but "Peccavi et Confidio," which is to say "I have made mistakes and am willing to confess them to you and ask your council and advice.

At this time when we constantly read and hear with sound of cymbals and the glare of trumpets of the great triumphs of medicine and surgery would it not be well for us to pause and make a retrospect of our lives, saying "We have left undone those things which we ought to have done and done those things we ought not to have done" and tell of our mistakes and errors of diagnosis, etc. In order that in the future we may all profit by them and thus steer clear of that Scylla and Charybdis, which to say the least is embarrassing to the physician and at times painful to the patient.

Pope (the great essayist) writes that "A man should never be ashamed to own that he has been in the wrong, which is but saying in other words, that he is wiser today than he was yesterday." I regret to say that in a practice of over thirty-five years that I have made many mistakes, some serious, some ludicrous and some harmless.

So as not to bore you, I will only give you one of each, but in passing let me tell you of a dream of one of my patients. She dreamed:

That during her then present illness, that she had died and gone to Heaven. St. Peter met her at the gate, and asked

her name. She replied Della H— of Charles Town, West Virginia. He looked over his records, frowned and said, "Yes, here is your name, but you are not due here for five years. Who was your physician?" She said Dr. N. of Charles Town, W. Va. St. Peter smiled, shrugged his shoulders and said, "Well you can come on in, but that doctor is always sending people up here too soon."

B. J. PALMER, CHIROPRACTOR

Reported by
DR. F. F. FARNSWORTH,
Charleston, W. Va.

Being in Washington, D. C., and learning that B. J. Palmer, discoverer, inventor and founder of the Chiropractic method of spinal adjustment, was lecturing at the Raleigh hotel, I went to hear him. My object was partly to satisfy myself as to the real teachings of the "fountain head," supplemented by a curiosity as to what he actually looked like. I, of course, felt a certain amount of prejudice against him but was prepared to give him the benefit of whatever argument he could produce, and credit for any facts he might establish.

His personal appearance and acts disappointed me. I supposed he would at least appear as a scholar and a man of dignity, but I found him garbed as a showman and with the unshaved face and long black hair of the seer or prophet for which he doubtless aimed to pose. I expected at least, a dignified explanation of some scientific facts to prove his contentions, but found him railing and ranting and even abusing the medical profession and everybody and everything else except his own creed. I will, therefore, for the purpose of better analysis, take up some of his statements exactly as he made them and as written down by me at the time.

"All diseases which have been in existence since the building of the pyramids are still in existence, not a single progressive step has ever been taken to cure or check them." "More disease exists now than ever before, more in proportion are dying until actually today more people are dying than are being born." Of course, these statements are so flagrantly untrue that a sensible person can hardly have patience to answer them. He overlooks the fact that yellow fever is a matter of history, malaria almost so, and leprosy now being controlled and cured; he has forgotten that where smallpox and typhoid once claimed their hundreds of thousands, they now claim only their dozens. He overlooks the fact that the average length of life has been increased ten years, and gives the lie to all government records and statistics. He probably does not know that during the year 1854 there died in the city of Philadelphia 89 out of every 1,000 of her population and that by medical and sanitary measures this mortality has been decreased year by year until last year there died in the city of Philadelphia only 14½ out of every 1,000 population, and this year it will be even better than that. What is true of Philadelphia is relatively true of other cities.

His next statements were: "All medical methods and works are entirely wrong." "I don't know anything about anatomy. I never dissected a body. The only reason for anatomy is to have an excuse for dissection, and the only reason for dissection is to know how to do surgery." He then entered into a long abuse of surgeons, saying he knew nothing about surgery and was proud of it. He said: "Laboratories are fakes. No disease was ever diagnosed in a

laboratory. They make the man fit the thing they want to call disease. There is no such thing as bacteriology. Microscopes are instruments of duplicity. How can they see germs when they do not exist? Pathology is only physiology gone wrong and they, the doctors, can't help it." He went on to say: "There has never been a single germ discovered that has ever caused a single disease." "Chemistry is not worth a dam, it is of no value. I would not give a cent for all the chemistry in the world. I don't know a solitary thing about chemistry and if I did, I would forget it and wash it out."

All the above statements are very remarkable, at least, when coming from a man who vehemently declared that he knew nothing about any of them. His next statement was: "Diagnosis is all guess work." "My analysis is better than uranalysis." "The laboratory works with the dead and finds just what he wants to." "If you follow books you won't get very far. I don't read books. Books are written for people who don't think and are written by people who don't or can't think. I sometimes write books." "I never saw or heard of an English scholar who wrote anything worth reading." "I don't know anything about grammar and have just sense enough to know it." "Books tell us that germs cause disease, and that we could not live an instant with a single germ in us." At this stage he villified doctors, scholars, scientists, etc., for awhile and then said, "I am right and you being wrong don't know it. There is no such disease as cancer or tuberculosis. The doctors say there are 25,000 diseases. It is not so. There are only two—plus and minus." Here he explained what he meant by plus and minus, but as I am a doctor and know something about the English language and methematics and several other things of which he said he was entirely ignorant, of course, I had no conception of what he meant. I did, however, have sense enough to write down what he said next and here it is:

"Nothing in medicine is sticking tight. It is changing every year. We chiropractors have not made a single change in a finding or deduction for 25 years. Sublexation—Books say it can't be done. Doctors say it can't be done, they know nothing except what they read in books. We chiropractors began to study and found out. Tell me where you are affected and I will tell you what nerve causes it and all about it. We found out these things and then worked out a system of adjustment, so if a fellow has anything wrong with him we just put him on a table and adjust him. Books tell something about a sympathetic nervous system and a lot of rot like that. They got it all in a laboratory. The doctor spends years in college and learns a million things and not one of them is so. I never went to college; I don't know anything about what's in books. I only know that we adjust backbones and it works. I guess it must be so. I don't know anything except that we get results. I just know it works and we get pay for it. I don't know anything about the nervous system."

He at this point entered into a long abuse of books of every kind and ended up by saying that doctors blamed all diseases on the solar plexus, but he didn't know what that was, but he was about to discover a nervous system of his own. He claimed that backbone adjustment would straighten bowed legs, untie a loop in the bowels, reduce a strangulated hernia, and bring back to life withered muscles and dead nerves, and then dramatically exclaimed, "Why should I

know anything about chemistry or toxicology to cure them, I use only adjustments." He later admitted that he got ptomaine poisoning by eating infected oysters, but said his stomach had sense enough to "throw them up."

He then said, "Adjustments make childbirth as easy as a nice clean movement of the bowels instead of 72 hours of excruciating pain, tears, lacerations, and often death; spinal adjustments make it like a pleasant dream." He then took a few minutes in trying to play upon the feelings and sympathies of the women present, holding out the hope of painless childbirth to them, whereas the doctor would grab the baby with a pair of iron tongs and "jerk" it out. Of course, all this stuff needs no comment.

Then he weakened his own argument against germs by saying that doctors had apparently proven that tuberculosis is caused by a germ, but admonished the chiropractors present that they must never admit this because if they did they would have to do something to kill the germs, whereas they must cure it by spinal adjustment which does not kill germs. After abusing chemistry, he made the astounding statement, "Everything in chiropractic is a chemical proposition;" but ended by saying, "Laboratories are not worth a goldarn."

At the end of this lecture it was evident that a large part of his audience was not in sympathy with him, but I could see how he might under the influence of home surroundings in Davenport where he could be more at ease and bring to bear on the new students the air and provincial impressions of being the real thing, impress them as being a great man, propounding a new and great truth, and bring them very quickly to believe in him.

I managed to overhear some expressions of the chiropractors present who used such terms as "Aint he wonderful?," "I wish I knew half as much as he does," etc. As for myself, I was undecided whether he was a rank fake and knew it, or whether he actually believed that all medicine was a lie, as he said it was, and had faith that he could establish another system with equal success. So I determined to attend his next lecture for further "work and instruction."

In the next lecture I made very little attempt to take notes for he spent a full hour in a vitrolic attack on the medical profession. He called them about everything that was vile and mean. He laid all crime of every description at the door of medicine; social disorder and governmental disturbances was all the work of their devilish duplicity. They reveled in social diseases and gloried in filth and dissipation. He did pause long enough to accuse the ministers of the gospel of being equally guilty and sneeringly referred to God Almighty as being an aid and abettor in their vile schemes.

To my surprise, he admitted that doctors and sanitary engineers have banished yellow fever from the Panama Canal Zone by draining out some swamps and pouring oil on others so that mosquitoes could not live, but said that God should have had gumption enough to put oil under the surface down there and made a hole in the ground so it could spout up itself, so as to save the expense of hauling it from Pennsylvania.

He made great fun of doctors' fight on flies, but finally admitted them to be a nuisance, but said that God ought to have been smart enough to have placed a doctor in the ark to swat the two lone flies who survived the flood. He wound up that it would have been cheaper to have transported a shipload of chiropractors

to Panama to adjust spines than to go to all the expense of doctors, sanitary engineers, and wasting so much good oil. He forgot, of course, to say that it would also have saved the lives of several billion mosquitoes for further usefulness.

At the end of this lecture I had found out all I cared to know about the man. Applying the classification of my friend, Dr. Brown of Shenandoah Junction, I at first decided he was only a "common liar," but upon more mature deliberation I rather felt inclined to honor him with the more distinguished title of "an expert liar;" but my conscience would not permit me to let him off so easy for it was plain that he was a "damn liar." However, to give him all credit due, I will just say he is "a common, expert, damned liar." As egotistic as a Chinese God and as ignorant as an African cannibal.

Because so many our members are so vitally interested in the nursing question as proprietors of hospitals or by virtue of being on the staffs of hospitals, it seems that it is not amiss to publish the report of the Committee on Nursing of the American Medico-Psychological Association as it appeared in the American Journal of Insanity for Oct., 1920.—Editor's Note.

REPORT OF COMMITTEE ON NURSING

By L. V. GUTHRIE, Chairman,
Huntington, W. Va.

Read at the Seventy-sixth Annual Meeting of the American Medico-Psychological Association, Cleveland, Ohio, June 1-4, 1920.

The following resolution was introduced by Dr. Gorst and adopted by the American Medico-Psychological Association at the meeting held in Chicago, 1918:

"*Resolved,* That a committee be appointed by this Association whose duty it shall be to investigate the methods of nursing and attendant care in both acute and chronic cases of the insane practiced in the United States and Canada, and to make its report, with recommendations at the next annual meeting."

Owing to the abnormal conditions throughout the United States and Canada incident to the world war, no report or recommendation was made at the Philadelphia meeting, as required by the above resolution.

Your committee has found that conditions have not yet returned to normal, as compared with the period before the war. We have undertaken, however, to report upon the situation as we find it at present and to offer recommendations pertinent thereto.

In order to get an expression from superintendents in various parts of the United States and Canada, a questionnaire was sent out on January 8 of this year. The list was prepared at random on a basis of 33 1-3 per cent of the membership, with the view of securing representative expression.

It is very gratifying to your committee to be able to state that practically all questionnaires were promptly filled out and returned, and the following information was obtained from same:

Ninety-nine per cent of the superintendents had difficulty in securing acceptable nurses.

The shortage of nurses was attributed to war conditions, higher rate of wages in other employments, long hours of disagreeable work in institutions, falling off in immigration and the transfer of many women to work usually done by men.

Less than 50 per cent of the institutions had training schools and less than 10 per cent of these were affiliated with a general hospital.

One hundred per cent of the superintendents who had training schools stated that the efficiency of their staff had been increased. Seventy per cent of those who had training schools stated that such training was optional. The course of training covered between two and three years.

Wages for pupil nurses and graduates show a wide discrepancy between various institutions, the figures being $10 to $12 for pupil nurses and from $60 to $110 for graduate nurses.

The answers indicated that as a usual thing the graduate nurses went into general hospitals, became private nurses, or entered upon matrimonial adventures, very few remaining in the parent institutions.

As to what method should be suggested to make more permanent the nursing staff, included, generally, better working conditions, higher wages and shorter hours.

As to whether there should be an interchange of work of undergraduates with nurses of a general hospital staff, the answers indicated a division of opinion. Some answered in the affirmative, while others were of the opinion that the nursing forces of the hospitals for the insane were in danger of disorganization by reason of association with under-graduates from general hospitals.

Ninety-nine per cent of the replies were in favor of teaching elementary nursing, first aid, and dietetics in public schools. One negative answer condemned this practice as being a "fad."

The hours recommended for a day's work ranged from 8 to 14, but with a predonderance favoring a 12-hour day.

The wage rate varied widely in different sections traversed by the questionnaire. In the United States the lowest wages are found in the South. The United States Government rate at Washington, D. C., was as follows:

"Pupil nurses and attendants, $40 to $50 per month. Graduate nurses, $55 to $65 per month. Charge nurses, $52.50 to $67.50 per month. Assistant supervisors, $55 to $75 per month. Supervisors, $60 to $85 per month. Increase in all grades from minimum to maximum at rate of $2.50 for every six month of continuous service. In addition there is a bonus in each case of $20 per month at the present time granted by Congress to all those employes above listed."

The attitude of the superintendents in answering the questionnaires relative to employes of other institutions discharged or otherwise, for the most part indicated proper regard for an ethical attitude, but a few superintendents admitted that owing to a scarcity of nurses they were compelled to accept inferior material.

The suggestion of an eight-hour shift for employees in hospitals for the insane provoked, as might have been expected, a marked divergence of opinion. A few maintained that shorter hours would result in better service, nevertheless, the predominance of opinion upheld the twelve-hour shift. Superintendents pointed out freely the enormous expense that would attend the change from twelve to eight hours, which would mean the addition of one-third more employees to many institutions in the country. This expense enlarged by the necessity for providing additional hous-

ing facilities and board for the third shift of employees, would seem to preclude the change as being impractical upon the present basis of administration.

Many experienced superintendents argued that with three shifts or the eight-hour turn, there would be constantly 66 2-3 per cent of the total number of employees idle around the institutions—a situation that would tend to stir up mischief and promote disorganization. Furthermore, there was expressed more or less generally the belief that with three shifts the responsibilities of the employees toward the patient would be so divided that a loss of personal interest would ensue and the welfare of the patients would be jeopardized.

It should be borne in mind that there is a distinctive difference between being "on duty" twelve hours a day and "working" twelve hours a day. It is one thing for a bricklayer, a carpenter or a hodcarrier to work eight hours per day and quite another matter for a nurse or hospital attendant to be on duty twelve hours. It is doubtful whether the nurse or attendant during the twelve-hour turn, really has six hours of actual work with about one hour and a half a day for meals, and the time further lightened by that consumed in going backward and forward on visits to their rooms, and their regular holiday periods which are granted without any deduction of pay.

It has been suggested that after making the proper deduction for time off duty, it will be found that the actual time on duty amounts to little more than eight hours per day and that about six hours of this time is put in in light, but at times, distasteful work.

Of all the superintendents interrogated only one was found to be in favor of the unionization of hospital employees and their affiliation with the American Federation of Labor. Almost the whole of the replies from superintendents vigorously opposed and condemned this proposal and offered the opinion that the unionization of hospital employees cannot be too strongly resisted. The answers to the questions also pointed out the following:

"The success of this movement would be detrimental alike to the employee, the patient and the state at large. The natural result of unionization would be to prostitute hospital service to a common level—far below the average maintained today. The first-class attendant would be robbed of the incentive of seeking enlarged reward by reason of superior diligence and capability. He would, on the contrary, be compelled to rank with the mediocre and inefficient whose rewards would be equal to his own. The greatest progressive principle in human life in this free republic would be strangled, and a bar sinister set up to progress. Loyalty to their employer (the state) would be transferred to loyalty to the union, and under such a condition of lowering of standards and a grievous demoralization would undoubtedly ensue."

A superintendent of wide experience and broad conception stated: "I consider this thing unwise and improper from the standpoint of the laboring people themselves. The majority of the patients in public hospitals for the insane come from the poorer classes. The rich resort to the private sanitarium, or to private nursing. It certainly would be unfair to the unfortunates in our hospitals to bring about a condition wherein the superintendent, a man skilled in his work, would be forced into subserviency to a union whose members are wholly unskilled in medical science and general administration. The change of aspect of these institutions from the purely

humanitarian to the commercial, as unionization would bring about, conjures possibilities against which every superintendent and every layman in the broad field of humanity should offer the stoutest resistance."

"If bricklayers engaged in putting up a building should go on a strike, there would be no suffering on the part of the inanimate clay composite in the brick, but if the nurses and attendants in a hospital, acting at the call of their union head, should go on strike, deserting their patients, the consequences may be more easily imagined than described. The thing is intolerable."

RECOMMENDATIONS

The data received from the questionnaire prompts the following recommendations:

1. The housing accommodations for hospital employees should be distinctly apart from the wards in which they are employed.

2. A material increase in the rate of wages will go far towards the solution of present difficulties.

3. Increased immigration from the English speaking countries should be encouraged.

In addition the committee feels it is an opportune time to properly recognize the importance of the whole subject of nursing in general, and especially as it relates to the care of the insane. The experience of the past several years indicates that the nursing problem involves more than its mere consideration as a vocation or profession used only to meet the needs of the individual who comes to our attention as physically or mentally ill. We believe it should be looked upon as of national importance and regarded as an essential defense, to meet the invasion of epidemics, the requirements of war and the general conservation of our national life. We suggest that its importance should be recognized and the subject taught in the common schools and that related courses should be given in the secondary and high schools. This will attract many young women to take up nursing as a profession who would otherwise drift into other occupations, and these young women so taught, whether attaining the goal of professional nurses or not, would become better housewives and better mothers for this experience. Not only this, but the information and experience thus acquired might easily prove invaluable in case of epidemic or other calamity affecting the community.

We believe that mentally ill patients should have nursing care, and that a training school for nurses should be an essential of a hospital's organization. Where it is not possible to obtain a sufficient number of pupil and graduate nurses to care for all the patients, at least the acute cases and the physically ill could get this care, arranging for the usual attendance to do the work of a more custodial nature.

We further suggest that this organization should not only go on record as strongly recommending the establishing of a training school for nurses in every hospital, but in addition should prescribe and lay out a course for training schools. This would establish a standard which could assist the individual hospital and at the same time improve and raise the level of care of the insane patient throughout the whole country.

The elimination of the itinerant attendant is a difficult matter, especially in times such as those through which we have been passing. When not contrary to law, we suggest that hospital superin-

tendents living in states grouped regionally, send out lists to other superintendents outside the regional group, giving the name of all attendants discharged, or those resigning without proper notice. By this method much could be done toward eliminating the undesirables.

We feel that we should not close this report without an expression of our high regard and gratitude for the faithful employees who have shown their devotion to duty during the past two or three years of stress in institutional management.

Respectfully submitted,

(Signed) L. V. GUTHRIE, *Chm.*,
E. H. COHOON,
R. H. HUTCHINGS,
W. H. PRITCHARD.

The President.—What will you do with this report?

Dr. Blumer, Providence, R. I.—I move that the report of the Committee on Nursing be received, and that the committee be continued. It is very easy to make a motion of that kind. Whenever I hear a report involving a great deal of work I feel that we owe the gentlemen who have given so much of their time, something more than a motion to receive the report and to continue the committee. We owe Dr. Guthrie, I am sure, a great debt of thanks for the work he has done.

Dr. Edwin N. Brush, Baltimore. — I would second the motion.

Dr. Blumer's motion unanimously carried.

HERNIAS OF THE OVARY, OF THE FALLOPIAN TUBE, AND OF THE OVARY AND FALLOPIAN TUBE

By AIME PAUL HEINECK, M. D.,
Chicago, Illinois

Hernia is a widespread disease. It occurs in both sexes and at all ages. The term Hernia signifies the permanent or temporary protrusion of one or more viscera from their normal situation through a normal or abnormal opening in the walls of the cavity within which it is contained. It implies the combined existence of a hernial ring, hernial sac, hernial sac-contents and hernial sac coverings. In the female, the frequency of external hernias, hernias whose outermost overlying saccular covering is skin, and which, after reaching a certain stage of development, give rise to a more or less visible and palpable, external swelling in the ischiatic, obturator, ventral, femoral, inguinal or other region, depending upon the anatomical location of the hernia.

I wish to formulate some conclusions based upon quite an extensive study of the literature and also upon my clinical experience, concerning that type of external hernias in which the hernial sac content is either the Fallopian tube, the ovary or the Fallopian tube and ovary, alone or in association with some other abdominal viscus or viscera.

The escape of the uterine appendages from their normal situation may take place through any of the weak spots or openings of the lower abdominal or andomino-pelvic cavities. A hernia originating either in the internal or in the external inguinal fossa and escaping above Poupart's ligament, is an inguinal hernia; if it escapes beneath the same ligament, and emerges through the obturator canal, an obturator hernia; if along the course of the gluteal or sciatic nerves and vessels, emerging almost always above, very infrequently below the pyriformis muscle, very rarely through the lesser sacrosciatic foramen,

a gluteal hernia; if through an operative scar in the abdominal wall, a post operative hernia.

The classifying of hernias into congenital and acquired is, at times, misleading. Many hernias are congenital in the truest sense of the word; they are complete at birth, hernial ring, hernial sac and hernial sac contents all being present. In others of the so-called congenital hernias, the sac only is existent at birth; in an acquired hernia, the sac is always of post-natal development, and is entirely derived from the pareital peritoneum, hernias "par glissement" excepted. Congenital hernial sacs result from non or incomplete closure of peritoneal processes normally present in the foetus, such as the processus vaginalis peritonei in the male, the canal of Nuck in the female, et cetera. These hernias may exist alone or in association with one or more other hernias of similar or dissimilar anatomical types, of similar or dissimilar clinical characteristics. Congenital hernias may appear at any period of life.

Orifices for the transmission of vessels and ducts are normally present in the muscular and aponeurotic layers of the abnominal walls. An acquired hernia is formed by the gradual or sudden escape through these orifices, pathologically widened, of a viscus or viscera normally contained within the abdominal cavity; the viscera in their passage through and beyond the abdominal wall create paths of escape for themselves by bulging and pushing forward the parietal peritoneum.

CONCLUSIONS

1. The Fallopian tube, the ovary, or the tube and ovary, in part or in their entirety, may be herniated. Degree may vary from a complete descent into a hernial sac, of the tube, ovary, or tube and ovary, to a condition where the herniated viscus or viscera lie just without the abdominal ring. The herniated organ or organs may be normal, may present degenerative changes of an atrophic, inflammatory or neoplastic nature.

2. Hernias of the uterine adnexa are often overlooked, not uncommonly misdiagnosed and therefore subjected to injudicious treatment, harmful alike to the hernial contents and to the individual, prejudicial alike to the patient's general well-being and to her reproductive capacity.

3. The herniated tube, ovary, or tube and ovary may be the sole content of a hernial sac or there may be present as associated hernial contents, one, two or more of the following structures or organs: Meckel's diverticulum, appendix vermiformis, omentum, urinary bladder, small or large intestine, rudimentary or fully developed uterus.

4. Tubal, ovarian, and tubo-ovarian hernias are congenital or acquired, unilateral or bilateral. If in the female, an inguinal hernia first appear late in life, it is difficult to state with absolute accuracy that an incompletely obliterated canal of Nuck did not predispose to its occurrence. These hernias may exist alone or are present with one or more other hernias of similar or dissimilar anatomical type, of similar or dissimilar clinical characteristics.

5. In a small proportion of cases, these herniias coexist with malformations, underdevelopment or absence of other internal or of some external genitalia. In Rabinovitz' case of double ovarian inguinal hernia, there was demonstrated at operation an absence of the uterus and a rudimentary vagina. Am. J. of Obstetrics 1915, Vol. 71, p. 804.

6. In individuals having a herniated tube, a herniated ovary, or a herniated tube and ovary, pathological states of other internal genitalia of some external genitalia may be present: Vaginitis, ovarian cystoma, uterine fibroid, uterine prolapse and other uterine displacements, etc.

7. Tubal ovarian or tubo-ovarian hernias may coexist with pathological states of organs other than the internal or external genitalia; Chronic Hydrocephalus, multiple stenosis of intestines, hydronephrosis, etc., those coexisting pathological states not having any relation of cause or effect to the hernial infirmity.

8. Congenital or acquired hernias of the tube, ovary, or tube and ovary, may become manifest at any period of life. Petit de la Villeon operated successfully a four months old baby for an inguinal hernia of the ovary, fimbriated extremity and body of tube. J. A. ded de Bordeaux 1913, Vol. 43, page 644. These hernias have been observed in mulliparae, primiparae, and in multiparae. No age is exempt. No race is immune. As hernias by their complications shorten life duration, the number of hernia bearing individuals that reach an advanced age is small as compared to that of the non-herniated.

9. Hernias of the uterine appendages are designated according to their anatomical site, as post-operative, ventral, gluteal, sciatic or ischiadic, obturator, femoral or inguinal. Statistics show that inguinal tubal, ovarian or tubo-ovarian hernias are eight times as common as all the other anatomical varieties of hernias.

10. Clinically, these hernias are said to be reducible, irreducible, non-inflamed, inflamed, strangulated or their pedicle may be the seat of torsion. This classification is based upon the state of the hernial contents or upon their relation to one another or to the sac. When the contents of a hernial sac cannot in their entirety be manipulated back into the abdominal cavity, the hernia is said to be irreducible, provided that there is not any or but a very slight interference with the blood supply of the herniated organ or organs and that there is no disturbance of function. If irreducibility and both functions and circulatory disturbances are present, the hernia is designated as strangulated.

11. Torsion of the pedicle of a herniated ovary or of a herniated tube and ovary, a not infrequent accident peculiar to hernias of the uterine appendages, presents the same clinical symptoms and determines in the sac contents the same anatomical changes as are observed in the strangulated hernias of the uterine appendages. All the reported cases of torsion of the pedicle of a herniated ovary or herniated tube and ovary were irreducible hernias, congenital in type, inguinal in location.

12. Tubal, ovarian and tubo-ovarian inguinal hernias are recent, old, or recurrent; are direct, interstitial or intraparietal, indirect or oblique. If indirect or oblique, they are either complete or incomplete. A few sliding hernias are on record.

13. All the bilateral, tubal, ovarian, or tubo-ovarian hernias recorded in medical literature of the last twenty years are of the inguinal variety. The bilaterality may date from birth; may be acquired. In bilateral hernias, both hernias may or may not show the same degree of development; they may have appeared simultaneously or one may have appeared a shorter or longer time before the other. They may show simi-

lar or dissimilar clinical characteristics. When bilateral, one hernia may be irreducible and the other reducible.

14. All the femoral tubal, ovarian or tubo-ovarian hernias recorded in the medical literature of the last twenty years were of the acquired type and appeared in advanced adult life. "Femoral hernia is essentially a hernia of adult life."

15. Hernias of the uterine appendages, in the absence of the non-herniated internal genitalia or of the external genitalia, do not if the herniated adnexa be of normal development, free from disease and reducible, prevent conception, interfere with gestation, nor unfavorably influence parturition. Pregnancy can occur previous to, during and subsequent to, the existence of hernias of this nature. Devane reports a case of femoral hernia of the oviduct presenting the following points of interest:

> Presence of the Fallopian tube in a femoral hernia at the fifth month of pregnancy. Tube excised. No interruption of pregnancy.
>
> The excision of the tube has apparently not interfered with subsequent conception, as the patient has since given birth to two full term children. The Lancet, 1916, Vol. 2, page 805.

16. The etiology of hernias of the uterine appendages is that of hernia in general. As main factors should be cited:

1. All conditions associated with or allowing an increased mobility of the uterine appendages:

(a) Lengthening of the broad ligaments consecutive to repeated pregnancies.

(b) Pathological relaxation of the ligaments due to puerperal subinvolution.

(c) Abnormal length of the broad, ovarian, and infundibulo-pelvic ligaments.

2. All conditions that tend to increase the intra-abdominal pressure:

(a) Sudden increase of the intra-abdominal pressure leads to hernia formation by overcoming the resistance offered by one or another of the weak points of the abdominal wall. Sudden increase of the intra-abdominal pressure may lead to the irruption of a tube, ovary, or tube and ovary in the sac of an old entercele.

(b) Occupations that call for repeated muscular efforts associated with increased intra-abdominal tension, as the lifting or pushing of heavy weights, etc.

(c) Physiological or pathological states distending the abdominal cavity, stretching the abdominal perietes, and widening the orifices normally present in the muscular and aponeurotic layers of the abdominal wall. Enteroptosis, obesity, abdominal tumors, ascites, pregnancy, etc., can be regarded as predisposing to hernia production. Hernias are of far more common occurrence in women who have borne children than in those who have remained sterile. Cestation acts in various ways. As it progresses, the position of the internal genitalia is changed and uterus, tubes and ovaries ascend above the pelvic strait. Pregnancy increases the mobility of the uterine appendages; distends, weakens and attenuates the abdominal parietes; it stretches, widens and dilates the hernial orifices and abnormally lengthens the broad ligament. Gestation further predisposes to hernia formation by loosening the subperitoneal connective tissue, relaxing the mesenteric and other means of visceral fixation and altering the intra-abdominal capacity. The ex-

pulsion efforts of delivery can exert an undeniable etiologual influence on hernia formation.

3. All conditions which weaken the abdominal wall: A hernia can occur wherever the parietal peritoneum is not sufficiently supported by the transversalis fascia and the other strictures of the abdominal wall.

(a) Acute or chronic diseases debilitating the organism, especially such as cause great emaciation.

(b) Obesity weakens the abdominal wall and increases the intra-abdominal pressure. The fat present in the abdominal wall, in the omental, mesentric, and other peritoneal folds explains why obesity plays such a role in hernia development.

(c) Traumatism. Most often the traumatism does not cause the hernia, but only reveals its existence. Among traumatisms must be mentioned abdominal operations and their sequelae. Pathological adhesions of viscera or omentum to the anterior parietal peritoneal wall near a hernia opening may act as a predisposing cause.

(d) Enteroceles, epiploceles, and enter-epiploceles.

(e) Feeble development or atrophy of the aponeurosis of the transversalis muscle, and of the conjoined tendon. This factor is an important one in direct inguinal hernia.

(f) Congenital anatomical defects facilitating tubal, ovarian or tubo-ovarian displacement.

17. The herniated organ or organs may be bound to the sac-wall or to each other; may be the seat of gestation, gangrene, hemorrhage, inflammation, suppuration, tuberculosis (primary or secondary), cystic and neoplastic disease (benign or malignant).

18. The herniated organ may be the seat of gestation.

19. The hernial sac and the herniated adnexa may be the seat of an inflammation, suppurative or other in character, which owing to progression by continuity of surface, has extended upward from the vagina, presenting the following progressive anatomical picture: Vaginitis, endocervicitis, endometritis, salpingitis or pyosalpinx, ovaritis and saccular peritonitis.

20. The hernial sac and the herniated contents may be the seat of an inflammation, suppurative or other in character, which originating in the vagina or in the uterus has reached the tube and ovary by way of the parametrial and parasalpingeal connective tissue.

21. Pathological processes originating in the hernial contents may, owing to extension by contiguity of tissue, involve the sac and its overlying tissues, and conversely, pathological processes, primarily involving the sac or the overlying tissues, can spread to the hernial contents.

22. The hernial sac and the herniated tube, ovary or tube and ovary can become the seat of an inflammatory or other pathological process originating in the associated hernial contents, epiploitis, appendicitis, gangrenous gut, etc., infection spreading by contiguity of surfaces.

23. The herniated tube, ovary, or tube and ovary, and the associated hernial contents may be free of disease or the uterine adnexa may be normal and pathological changes be present in the associated hernial contents; appendicitis, gangrenous gut, epiploitis, etc.

24. The associated hernial contents may be normal and the herniated uterine adnexa be the seat of morbid changes.

25. It is at times difficult, at times impossible, to determine whether the

anatomical changes present in the herniated organ or organs, developed previous to or subsequent to the development of the tube, ovary, or the tube and ovary into the hernial sac.

26. Truss treatment for hernia of the uterine appendages is not curative, is often productive of discomfort, and not infrequently interferes with the nutrition and development of the herniated tube or ovary.

27. Women who suffer from any form of hernia should be carefully watched before, during and after their confinement so as to prevent or rather minimize any undue strain upon weak regions of the abdominal wall. These women, at the close of lactation or towards the end of the first year following their confinement, should, in the absence of contra-indications, be subjected to an operation for radical cure of the hernia.

28. After the second year of life, spontaneous cure of hernias of the uterine adnexa is rare and can occur only if the hernial contents are easily reduced and easily kept reduced.

29. In the female, all hernias irrespective of anatomical site, of clinical condition, or of nature of contents should, in the absence of a constitutional state contra-indicating operations of election, be subjected to an operation for radical cure.

30. We advise that all adnexa hernias, irrespective of the patient's age, irrespective of anatomical site or of size, be subjected to an operation for radical cure:

(a) If the hernia be irreducible.

(b) If the hernia be strangulated.

(c) If the pedicle of the herniated organ or organs be the seat of torsion.

After the age of two years:

(d) If the hernia be bilateral.

(e)) If other hernias be co-existent.

(f) When the hernia cannot be painlessly, completely, and permanently kept reduced.

(g) If organs other than the uterine appendages be also present in the same hernial sac.

(h) If the wearing of a hernial ring truss causes pain or aggravates the symptoms.

(i) If the patient has to be subjected to other, chloroform or other general surgical anaesthesia for the performance of an operation of election, double advantage can be taken of this anaesthesia, and an operation for the radical cure of the hernia performed.

(j) If the patient is exposed to pregnancy.

31. Clinical conditions so closely simulating hernia of the uterine appendages that a positive diagnosis without operation appears impossible, should be subjected to operative treatment. Only benefit can be derived from adherence to this rule. A diagnosis is established, and a cure is effected.

32. In hernias of the uterine appendages, as in all other hernias, the ideal time for operation is previous to the development of degenerative or other pathological states in the herniated organ or organs, and previous to the occurrence of any of the various complications incident to hernias. Early operations give the most satisfactory results.

33. The mortality of operations for the radical cure of hernias, if performed at an opportune time and by a rapid operator, competently assisted, is practically nil.

34. To be effective, operations for radical cure of hernias must well fulfil two essentials: The suppression of the

sac and the strengthening of the area of the wall through which the hernia has escaped. In all herniatomies, the sac should be incised and the hernial contents examined. In the female, the inguinal rings are comparatively small. They can, without inconvenience to the patient, be closed.

35. Important operative points:

(a) Always wear and have the assistants wear rubber gloves.

(b) All ligatures and irremovable buried sutures should be of absorbable material.

(c) In ingual hernias always divide the aponeurosis of the external oblique muscle to an extent sufficient to give a good exposure of the inguinal canal and of its contents. In the female, the inguinal canal in its normal state and after an inguinal hernia operation, in its restored state, should, outside of a few arterioles and nerve filaments, contain nothing but the round ligament, a structure much smaller than the spermatic cord. This round ligament comes from the muscular structure of the uterus; it finally becomes lost in the labium majus. In a hernia operation, the round, ligament, if not the seat of disease, should never be sacrificed.

(d) Always make a high and careful dissection of the hernial sac from the surrounding tissues, and especially from the round ligament to which it is often quite intimately adherent.

(e) Always open the sac and determine by direct inspection and, if necessary, by palpation, the nature and state of the hernial contents.

(f) After reduction or ablation of the hernial contents, the sac is to be transfixed and ligated as high as possible. Sac is then removed flush with the peritoneal cavity. This high and thorough removal of the sac is most important. Many operators fix the hernial sac-stump to the abdominal wall, immediately above the hernial ring.

(g) Never sacrifice the round ligament; it is harmful to the statics of the uterus. Never transplant the round ligament; it is unnecessary. No drainage. After operation, no truss should be worn; a truss does not support the scar; it weakens it.

37. The tube or ovary when herniated will be removed, if it or they be the seat of:

(a) Impending or actual gangrene.

(b) Benign neoplastic disease.

(c) Malignant neoplastic disease.

(d) Voluminous cyst formation (unilocular or multilocular).

(e) Malformation or incomplete development.

(f) Suppurative inflammation.

(g) Hematoma or interstitial ovarian hemorrhage.

(h) Seat of tubal gestation, previous or subsequent to rupture of foetal sac.

(i) Tuberculosis, limited to or extending beyond the herniated organ.

(j) Distortion beyond recognition.

(k) Such pathological changes as prevent function, (hydro-salpinx).

38. Until we are better informed as to the frequency and nature of true and false hermaphroditism, removed herniated uterine adnexa not having a distinctive structure should be subjected to a microscopical examination. This will avoid mistaking testicular for ovarian tissue and vice versa.

39. In the treatment of strangulated sciatic or gluteal, obturator and femoral hernias of the uterine appendages in which the hernial sac also contains gangrenous gut, a double operation is almost indicated; a laparotomy for the repair of the intestinal lesions, and a herniotomy for radical cure of the hernia.

40. The herniated tube, ovary, or tube and ovary can be removed through the usual herniotomy incisions. The operative steps for the removal of these herniated organs correspond, short of a laparotomy, to the technique ordinarily used in salpingectomy, ovariectomy, and cophorectomy.

EPILEPSY A SYMPTOM OF SPLANCHNOPTOSIS

By CHARLES A. L. REED, M. D.,
Cincinnati, Ohio.

Abstract of Paper Read Before the Southern Surgical Association, Hot Springs, Va., Dec. 16, 1920.

The fact that chronic convulsive toxemia, usually called epilepsy, is constantly associated with displacements of the abdominal organs has now been demonstrated in 810 consecutive cases in my own hands. This demonstration has consisted of, first, the clinical history and, second, the physical examination of the patient; third, the serial x-ray study, and, finally, in the vast majority of instances, the surgical exploration of the abdominal cavity. This record, showing the additional and significant fact that the visceral condition is always antecedent to and associated with the convulsion phenomena, as shown by the earlier development of constipation, and the absence of both hereditary factors and extra-abdominal lesions, forces the conclusion that so-called epilepsy occurs only as a symptom of splanchnoptosis. This conclusion is further confirmed not only by my own observation but by the daily observation of every general practitioner to the effect that epilepsy is always associated with constipation; that the epilepsy is worse when the constipation is worse; and that the most effective, ready-at-hand relief from seizures is offered by laxatives. It was this fact, confirmed by surgical experience, that prompted me to write my first article on the subject under the title of "Constipation and Epilepsy" (1) and upon which I based my second article entitled "The Probable Cause and Logical Treatment of Epilepsy." (2) My later experience recorded in subsequent reports, (3) has shown that constipation while antecedent to and associated with the seizures in these cases is, like the seizures themselves, a symptom of splanchnoptosis. The mere fact that many people who have splanchnoptosis do not have so-called epilepsy does not and can not in the least invalidate the observed and here recorded fact that eight hundred and ten people who did have epilepsy likewise had splanchnoptosis and that the development of the splanchnoptosis was antecedent to the epilepsy. The explanation of this difference, which will doubtless sometime be furnished through biochemic research, is something with which I have no concern in this connection. I am simply interested at this time in the basic fact, namely, that epilepsy is always associated with and is therefore a symptom of splanchnoptosis.

The basic fact, here affirmed, is susceptible of verification at the hands of every practitioner who sees these cases and especially by every institution now acting in a custodial capacity to large groups of these unfortunates. To begin with, the cases must be examined—really examined. This means that a thorough history must be taken. Then the patient must be stripped. The physical inventory should be carefully made, front and back, from head to foot. Special search should be made for possible foci of infection, not as primary but as ancillary factors in the case. The abdomen should be gone over, first, with the patient on his back; next, with him erect. A very

little praetiee with abdominal percussion will enable the physieian to deteet the gastrie note, the eeeal note, the transverse-eolonie note, sometimes the sigmoidal note. With the patient on his back, these notes will generally be found approximately in their normal positions, with the possible exeeption of the eeeal note whieh in these eases will always be found low in the right lower quadrant, sometimes as low as poupart's ligament. Now stand the patients up and it will be found that all of these notes, these separate areas of resonanee, will have beeome obseured, more or less blended, by gravitation into the lower zone of the abdomen. The only note that does not thus migrate downward is that of the eardia whieh, however, is generally farther around to the left and toward the back. In other words, the viseera will have dropped. This examination is all very easy—and very, very important.

Then all eases, espeeially in the present status of the whole question, should be given an x-ray study. When this study is done right it is very elarifying; when done wrong it is very misleading. It is done approximately right when the following rules are observed: (1) The patient should be free from all laxatives or enemas for at least twenty-four hours before taking the barium meal; (2) the barium meal should be taken at 9 o'cloek in the morning; (3) the first pieture, to show the stomaeh and beginning duodenal transit, should be taken ten minutes later — with the patient upright; (4) the seeond pieture, to show conditions at the ileo-eecal juneture, should be taken at 3 o'eloek in the afternoon—with the patient prone; (5) the third pieture, to show the eondition and position of the colon, should be taken at 9 o'cloek the next morning—with the patient upright. These pictures are essential; others (after ingestion) to show (a) eompleted transit or (b) relative positions of colon prone and standing; or (after enema) to show (c) redundancy or not of the sigmoid; (d) ileo-eeeal competency or not; or (e) other eonditions, may be taken or not according to the indications of the individual ease. Of eourse decensus of the liver and kidneys is not shown by the x-ray but may be deteeted by eareful palpation in different positions.

The ease with which all of this can be done, and the importanee of the faets thus elieited, make such examination of these eases an imperative duty not only for individual practitioners but for institutions. I ean not resist this opportunity to insist more espeeially upon the duties of institutions in the premises.

(1) All institutions for epilepties should be provided with a well equipped, eompetent and liberally supported roentgenologie serviee.

(2) There should be a roentgenologie survey of the entire epileptie population of all publie institutions for the purpose of determining the eondition of the abdominal viscera.

(3) The diagnosis should be individualized in each ease with referenee, first, to viseeral eausative faetors; and, seeond, to available treatment with the object and understanding that the treatment in all eases should be direeted to overcoming such visceral eonditions either by medieal and hygienic treatment or, when neeessary, by surgical restitution of the parts.

The same rules apply, with possibly greater foree, to all hospitals for the insane, but that is another story.

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(1) Cincinnati Lancet Clinic, July 25, 1914.
(2) Journal American Medical Assn., March 27, 1915.
(3) Ibid, January 29, 1916; September 20, 1916.

The West Virginia Medical Journal

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SECOND DISTRICT—J. C. Irons, Dartmoor, one-year term; C. H. Maxwell, Morgantown, two-year term.

THIRD DISTRICT—C. R. Ogden, Clarksburg, one-year term; L. H. Forman, Buckhannon, two-year term.

FOURTH DISTRICT—G. D. Jeffers, Parkersburg, one-year term; W. S. Link, Parkersburg, two-year term.

FIFTH DISTRICT—J. E. McDonald, Logan, one-year term; E. H. Thompson, Bluefield, two-year term.

SIXTH DISTRICT—R. H. Dunn, Charleston, one-year term; J. W. Moore, Charleston, two-year term.

DR. E. H. THOMPSON

We face the passing of souls to that realm where they take up more advanced duties under His immediate care, so frequently in the course of our duties, that for us the fear and sting of the Grim Reaper's visit has departed. It ceases to be a shock to us because as true physicians, doing our work to the best of our ability, the dread is gone.

Yet when one of our brother physicians, one whom we have come to feel akin to as a blood brother, is suddenly cut off in the very hey-day of his manhood and in the midst of his work, there is a shock which makes us reel.

It is with great sadness, and a feeling of personal loss, that the death of Dr. E. H. Thompson, of Bluefield, on December 14th, is announced to the members of the State Association.

Dr. Thompson was a Councillor of the Association and had been re-elected to succeed himself, at the last meeting in Parkersburg. His counsels will be missed in the deliberations of this body, for his calm reasoning helped greatly to solve the perplexing problems coming up for consideration.

The loss to me will be far greater as time passes for he always visited me when passing through Huntington, and his advice and encouragement have been of untold help to a depressed editor. To know that he will not drop in to chat things over again is hardly to be realized.

His death followed an accident in which his automobile was struck by a street car. From the reports reaching us it was one of those accidents which are seemingly unavoidable. He lived for several days despite a fracture of the skull, several ribs and internal injuries.

"Herb" has passed on but of him it may be truly said he is not to be forgotten by those of us who knew and loved him.

THE NEED FOR *PROMPT* PAYMENT OF DUES

There has always been something of this kind in the January issue of the Journal since its beginning and this year is no exception. But, Fellow Members, please read on.

We see by the lay press that the cost of the various articles of commerce is coming down or is going to drop. Not so the cost of our Journal. The price for it is going up. The printing trade conditions are such that the price of the Journal bids fair to increase some forty to fifty percent for publication.

After much conferring with the editors of other State Journals and the Cooperative Medical Advertising Bureau of the A. M. A., it has been found necessary for all Journals to increase the rates for advertising fifty percent. It is a question as to whether or not even this increase together with the subscription from the members will meet the cost of publication.

Now get the reason for the italicization of Prompt above. Extra copies of the Journal will cost twenty-five cents each. You can see that the Two Dollars only pays for two-thirds the cost of the Journal you receive. If a number are carried over whose dues are not paid it will make quite an addition to the monthly cost.

Dues must be paid by April first, according to the By-Laws. It is urged that the members make payment promptly to their local Secretaries and that they in turn make report to the Secretary of the State Association, Dr. Robert A. Ashworth, Moundsville, W. Va. Remember that he has to send the lists of members whose dues are paid to the Editor. Unless your name appears on this list as having paid before April first, it will be dropped from the mailing list of the Journal. Since it will be necessary each month to carefully count the number of names and get "just enough" copies there will be no extra ones to send delinquent members who may subsequently pay up, you can see the necessity for paying promptly.

Another matter is important. A notice is sent to each man when his paper is to be published asking if he wishes reprints. Please reply promptly for the publisher can make a better price when the type is already set, than if should have to re-set. If you do not wish reprints but desire a few extra copies of the issue containing your article they will cost you twenty-five cents each and the postage as second-class matter. This is the cost to the Journal.

Bear these things in mind and do not get peeved if you have not paid your dues and you fail to receive your copy.

A SIDELIGHT ON CHIROPRACTIC

It is urged that each one of our readers will turn to the report by Dr. Farnsworth concerning B. J. Palmer, Chiropractor, in this issue.

This is very illuminating as to the personality of this high priest of this particular branch of illegal practitioners of the healing art. The facile pen of our fellow member has certainly given us a picture not in the least calculated to raise our opinion of the abilities of these persons.

Again let me remind you that it is planned to get a bill through at the coming session of the Legislature legalizing them in this state.

Fellow members! Get busy and see your members of the House of Delegates and write your State Senators in regard to this matter. Read Dr. Farnsworth's report to them. I wish it was financially possible for the Journal to have five thousand reprints for distribution printed.

GREETINGS FOR THE NEW YEAR

To wish you each one a Happy and Prosperous New Year is one of the pleasures of your Editor. May all of your hopes be realized and may good health and happiness attend you.

At this time of making New Year Resolutions, Good Resolutions or making anew Good, Old Resolutions, let us all add one about our State Association and our Journal.

First—Let us each resolve to attend each meeting of our local Society; to take part in its activities and to make a personal effort to secure every eligible physician in the county as a member. Thus making 1921 the biggest and best and most enthusiastic year of the Association's history.

Second—That we will help the Editor of the Journal to make it just what we wish it to be by sending one news item each month from every county in the state; by seeing to it that a report of every County Society meeting is reported to the Journal while it is fresh news; that we will try to help secure more advertising; that we will read all the advertisements in our Journal and THEN PATRONIZE OUR ADVERTISERS and tell them you saw it in OUR JOURNAL; that we will send in all worthwhile contributions whether they be essays, papers or case reports.

State News

After twelve years of successful practice at Flatwoods, Dr. O. L. Hudkins has located in Weston to practice his profession. Dr. Lester Miller, of Gypsy, W. Va., has succeeded Dr. Hudkins at Flatwoods.

Dr. J. Allison Hodges, of Richmond, Va., announces to the profession that he has sold the Hygeia Hospital to Dr. J. R. Blair, who will conduct it as a General Hospital. Dr. Hodges will devote his attention solely to consultation and hospital practice.

Dr. S. L. Spragg, aged 68, well known Wheeling physician, died in that city in November. He was a graduate of Jefferson Medical College, of Philadelphia. He served a term as city health officer of Wheeling.

Dr. Woodford Hinzman died at the State Tuberculosis Sanitarium, November 22, 1920, after several months illness from pulmonary tuberculosis. For several years he was a practicing physician at Troy, W. Va., but on account of failing health he went to the S. T. S. seven years ago, and after recuperating did several years of valuable work up to the

time of his relapse a few months previous. He was a graduate from the West Virginia Wesleyan and graduated in medicine from the College of Physicians and Surgeons, Baltimore, in the class of 1903. He had been a member of the Lewis County Medical Society for a number of years.

Dr. A. P. Butt, of Elkins, spent sometime in November with the Mayo Clinics at Rochester, Minn.

Dr. Nellie Yost, of Huntington, has recently returned from New York City where she took some special work at the Post-Graduate School and at the Bellvue Hospital.

Dr. J. C. Kessler, of Huntington, on a recent bear hunt in Nicholas County, killed a two-year-old bear weighing 150 pounds which he served to a number of his friends at a dinner party at his home.

Dr. Fred Marcum, of Ceredo, is at Louisville, where he will take treatment at a hospital.

Dr. Frank Sturgill, of Ceredo, left recently for Florida where he will spend the winter.

Dr. William P. Bonar, of Moundsville, is in Florida looking after his orange grove.

Dr. Benjamin F. Bone, of Moundsville, has returned from his annual hunting trip in Michigan. The doctor was fortunate enough to get two fine deer.

Dr. Charles E. Hutchinson was elected to the House of Delegates from Marshall County. Dr. Hutchinson was a former sheriff of Marshall and former president of the medical society of that county.

Dr. J. E. Cooper and wife, of Cameron, have returned from a visit to Tulsa, Oklahoma.

Dr. R. G. Werner, formerly of Parkersburg, has located in Akron, Ohio, where he is practicing his profession.

Dr. Charles Boyer, of Ellenboro, has opened offices in Parkersburg.

Dr. R. H. Paden, formerly of Akron, has located in Parkersburg.

Dr. H. M. Campbell, of Parkersburg, has been seriously ill with arthritis but is somewhat improved, although still confined to his bed.

Dr. J. M. Teter, formerly located at Riverton, W. Va., has opened offices in Huntington.

Dr. and Mrs. J. Edward Hubbard, of Huntington, have returned from a two weeks' trip to Pittsburgh and New York City.

Dr. and Mrs. C. M. Hawes, of Huntington, will entertain for the holidays Col. George P. Hawes, Major and Mrs. G. P. Hawes, of Richmond, Va.

Rear Admiral W. C. Braisted, surgeon general of the U. S. Navy since 1914, was placed on the retired list the last of November and was succeeded by Rear Admiral Edward R. Stitt. Dr. Stitt is 53 years of age and a graduate of the University of Pennsylvania,

School of Medicine, in 1889. He is considered an authority on tropical diseases and at the time of his appointment was head of the naval medical school in Washington.

Dr. William Thomas Greene Morton, the discoverer of anesthesia, has been elected to a place in the Hall of Fame. He was first a dental surgeon and later a physician. Morton called his discovery letheon but it is now known as ether. It was first used publicly in the Massachusetts General Hospital, in the fall of 1846 by Dr. J. C. Warren, whom Morton told of his discovery. Of the 178 names voted on this year for the Hall of Fame, seven were chosen, and it is interesting to note that Samuel Langhorne Clemens (Mark Twain) and Morton received the largest number of votes—72 each.

Medical and surgical staff of the Chesapeake & Ohio hospital at Huntington, entertained some representatives of the crafts of the railroad at a banquet in the hospital Saturday night, December 18. Dr. Lindsey T. Vinson acted as toastmaster, and addresses were made by G. H. Stewart, Covington, president of the System Federation; H. M. Brown, retiring shop superintendent; Dr. R. J. Wilkinson, chief surgeon of the Huntington hospital, and others. The hospital staff includes Dr. Wilkinson, Dr. W. E. Vest, Dr. Charles Willis, Dr. F. C. Hodges, Dr. J. E. Hubbard, Dr. Boyee Taylor, Dr. L. T. Vinson and Dr. E. D. Wells.

Dr. Otto F. Richter, of White Sulphur Springs, W. Va., died at his home at that place November 10. He was fifty-seven years of age and received his medical education at the Medical College of Virginia, from which he graduated in 1884.

The staff of the Cook Hospital, of Fairmont, is announced as follows: Surgical, Dr. H. H. Carr; medical, Dr. C. W. Waddell; obstetrics and gynecology, Dr. C. S. Fleming; disease children, Dr. C. L. Holland; gastro-enterology, Dr. J. B. Clinton; genito-urinary surgery, Dr. H. S. Keister; anaesthetic, Dr. L. D. Norris; ear, eye, nose and throat, Dr. H. R. Johnson; X-ray, Dr. H. H. Carr; clinical pathology, Dr. C. W. Waddell.

Society Proceedings

Editor Bloss:

The Marshall Medical Society met Tuesday at 3 o'clock at the Parish House as the guests of the Civic Branch of the Tuesday's Art Club.

This meeting, though the attendance was small on account of the hour, was the best meeting of the year and will long be remembered by the doctors and their wives. Dr. Leo Covert read the scientific paper of the evening on "Blood Transfusion." This paper was complete, covering the entire subject in a masterful manner and was one of the best papers ever read before the society. The paper was discussed by Drs. Morgan, Compton and Ashworth.

The splendid, short snappy musical program, rendered by Miss Evelyn Booher, Mrs. Ed Weaver and Mrs. Ignatius Brennan of the Tuesday Art Club soothed our tired nerves and our appetites were pleasingly and substantially satisfied by the six o'clock dinner served to the doctors and their wives.

Miss Francis McMahon gave us a talk on Rural Health Survey, giving us statistics of the County Health Surveys of Upshur and Logan.

Supt. of Schools, H. E. Carmichael discussed the needs of a survey in this

county. The Medical Society unanimously agreed to ask for a health survey and to get squarely behind this movement and help the Tuesday Art Club to put it across.

Yours fraternally,
ROBERT A. ASHWORTH.

Parkersburg, W. Va., Dec. 10, 1920.
Dr. James R. Bloss, Editor,
Huntington, W. Va.
Dear Doctor Bloss:

The Little Kanawha and Ohio Valley Medical Society met in regular session with the president, Dr. S. D. H. Wise, presiding. The minutes of the previous meeting were read and approved. Dr. Andre Crotti, of Columbus, Ohio, was present and gave a very interesting and instructive talk on Goitre. Many patients with Goitre were present and Dr. Crotti examined each patient, diagnosing the different types of Goitre and outlined the methods of treatment. After the clinical cases had been disposed of Dr. Crotti gave a lecture, illustrated with lantern slides, showing the many different types of Goitre, and results after being treated. This was one of our very best meetings, and our Society is very grateful to Dr. Crotti for giving us such an interesting and instructive lecture.

W. B. RICHARDSON,
Secretary.

Fairmont, W. Va., Dec. 17, 1920.
Dr. James R. Bloss,
Editor W. Va. Medical Journal,
Huntington, W. Va.
Dear Doctor:

At last something from the Marion County Medical Society.

Enclosed find copy of the Memorial on death of Dr. McDonald ordered written by the Society. Will you kindly put same in the Journal.

I am also enclosing the names of the new staff elected to the Cook hospital at our last meeting.

I am sorry that news has been scarce, but really Doctor, our Society has been dead, as far as news and work was concerned, but we have broken forth now and hope to do big things.

One of the best means of bringing members out and get together has finally been accomplished and that has been by having the doctors agree to meet once a week and have luncheon together at noon-hour. We have met twice and both have been a perfect success.

I hope to have news each month for you from now on.

Fraternally,
J. B. CLINTON.

MEMORIALIZING THE DEATH OF DR. JAMES WILSON McDONALD

Dr. James Wilson McDonald died in Coblenz, Germany, October 5th, 1920, while in the service of the overseas medical department of the Y. M. C. A., a service which began during the great war.

Dr. McDonald's death constitutes a deeply-felt loss to the Marion County Medical Society, a loss of which it is fitting that formal notice be taken in our records.

Dr. McDonald was the first Secretary of this county society, an office which he filled conscientiously and capably for a number of years. It is not too much to say that the early success and continuation of the society under the difficulties which usually beset a new organization was due in no small measure to his painstaking efforts in its behalf. At a later time he occupied the chair of president no less creditably; and was a frequent

representative of the local society in the annual meetings of the State Association.

It was not, however, as an officer that he deserves most to be remembered by this society, but as one of its most exemplary members. To him attendance on the meetings of this society was not only a duty, but a rare privilege, which he felt that he could not afford to neglect. A study of the records would show, I believe, that he was the most regular and constant attendant the society has ever had. He was always punctilious in the performance of any duty assigned him; and no committee of which he was chairman ever failed to make a report at the proper time.

It is pleasant to remember our departed brother practitioner as a man of high Christian character; a physician and surgeon of ability, who by worthy example preached the value of organization in the medical profession; a citizen who stood for the better things in life; a trustworthy friend to whom one could go in distress; a boon companion with whom one could always spend a pleasant hour.

C. W. WADDELL,
L. D. NORRIS,
H. R. JOHNSON,
Committee.

November 30, 1920.

Medicine

QUININ IN INFLUENZAL PNEUMONIA

Excellent results are reported by A. J. Caffrey, Milwaukee (*Journal A. M. A.*, April 24, 1920) from the use of quinin hydrobromid in the treatment of influenzal pneumonia. It seems to have given more satisfaction than the sulphate, in that the patients seemed more restful, it reduces the fever promptly, and in most instances keeps it under 100 F. Caffrey gives 25 grains for the first dose, 10 grains for the second dose, and continued throughout the course of the disease with 5 grains every four hours. He has never had a complaint of quinin amblyopia or marked tinnitus aurium and head noises which patients usually complain of when the drug is used in other troubles. Among twenty-seven patients receiving this treatment with other auxiliary drugs, such as digitalis, atropin and pituitary extract, good nursing, nourishing diet, fresh air, etc., there was only one death.

EXTRARENAL ELIMINATION OF CARDIAC EDEMA

Heineke tabulates the findings in a number of extremely severe cases of edema from heart disease to demonstrate that instead of depending on the diuresis figures in estimation of the course of the case, the scales should be consulted. The patient's weight is the main criterion of the success of the efforts to reduce the edema. He does not agree with those who maintain that digitalis and strophanthin given for the heart disease are liable to induce contraction of the vessels in the kidneys, thus closing the outlet for the fluid through the kidneys. There may be other causes for the lack of effectual diuresis. The mobilization of the edema fluid by the action of the heart tonic on the circulation, and the consecutive hydremia, promote both the renal and the extrarenal elimination of the water. It is more difficult, however, for the circulation through the complicated system of glomeruli and tubuli to be restored to approximate normal than the circulation through the vessels in the skin. Hence the vessels in the skin may get to work sooner and act more efficiently than the vessels in the kidneys; there is no

need to assume any constriction of the renal vessels to explain this delay in their functioning. In the cases of which curves are given, the extreme stasis in the vessels in the kidney was evidently exceptionally difficult to overcome. Heinekc remarks in conclusion that he does not know of a single authentic instance on record of constriction of the renal vessels from the action of a heart tonic. His extensive experience, on the other hand, with cases of heart disease has convinced him that too often digitalis is given in inadequate doses and not kept up long enough and, above all, that there is too much dread of the intravenous route. He cites Meyer's successful case in which a digitalis preparation was given daily for a year.

INFLUENZA PREVENTION

Dr. Allen W. Freeman, Columbus, Ohio: The hypotheses on which we have operated up to this time are that (1) influenza is caused by a specific living virus; (2) the portals of entry of this virus are the nose and the mouth; (3) this virus is contained in the secretions from the nose, mouth and respiratory tract, and (4) the virus is communicated by transference of spittle and nasal secretion through direct or indirect contact, and by droplet infection from coughing and sneezing. No convincing experimental evidence has been advanced in support of any of these hypotheses. On this basis, however, various preventive measures have been proposed, of which the most important are: (1) isolation of patients; (2) prohibition of public gatherings; (3) masking of the general population; (4) general vaccination with anti-streptococcic or mixed vaccines, and (5) general educational propaganda. The practically unanimous verdict of laboratory workers, however, is to the effect that the true virus of influenza has not yet been isolated and that such a vaccine cannot yet be prepared. Until additional evidence is produced regarding existing vaccines or until a truly specific vaccine is developed, general vaccination cannot be considered a sound administrative procedure. Our energies, therefore, must be directed rather to the prevention of fatal complications than to the prevention of influenza itself. For this purpose, adequate medical and nursing service and properly equipped hospitals should be organized and made available for instant use. In these hospitals and in the home care of patients, every effort must be made to prevent secondary and cross infection. — Journal A. M. A., Nov. 15, 1919.

RELATION OF SPUTUM BACTERIA TO ASTHMA

Dr. Francis M. Rackemann, Boston: Asthma is a syndrome that may be divided according to its cause into two groups, extrinsic and intrinsic. We are here concerned with those cases of intrinsic asthma in which a focus of bacterial infection in the bronchi is assumed to be the cause. The method of study has been to make intradermal tests with pure vaccines made from organisms isolated on blood agar plates from the patient's sputum, and to institute treatment on the basis of these tests. An early positive skin test was found in one-half hour to consist of an urticarial wheal surrounded by erythema, but late positive tests were found in twenty-four hours to resemble an inflammation. One hundred and twenty-nine organisms were isolated from thirty-nine patients. They included nonhemolytic streptococci, 60 per cent; hemolytic streptococci, 13 per

cent, and staphylococci, 8 per cent. The pneumococcus was found only three times. Twenty-five of this group of thirty-nine patients gave a positive test to one or more vaccines. There were twenty positive tests to an auto genous vaccine and fifteen positives to a heterologous vaccine. In addition to this original group, seventeen patients were tested with only heterologous vaccines, and nine reacted positively. Thus, in the whole group of fifty-six patients, thirty-four, or 67 per cent, gave a positive skin test.

Taking the two groups together, 358 individual intradermal injections were made; 19.5 per cent of these were classed as positives, which figure includes 7.5 per cent early positive, 7.2 per cent late positive, and in addition 4.8 per cent positive both early and late. With reference to the individual organisms, and considering only those tested on at least five patients, a total of 283 tests were made with thirty-two different vaccines. Fourteen of these thirty-two organisms gave no test at all, and of the four that did give more than two positives, one was a hemolytic streptococcus with three positives, and two were Staphylococcus albus with four each. One, a gram negative bacillus, was irritating in that ten positives were obtained in eighteen tests. Treatment with small doses of pure vaccines given at seven-day intervals was carried out in twenty-six patients with results that were in very close accord with the presence or absence of a positive skin test. Of the sixteen patients who were treated with the organism to which they gave a positive test, fourteen were treated successfully. In ten instances this treatment was with an autogenous vaccine. However, ten other patients were treated in the face of a negative test, but with no success at all. The organisms used in treatment, whether successful or unsuccessful, included representatives of each variety found, but were mostly nonhemolytic. These results indicate that the treatment of intrinsic asthma with vaccines is specific.—Ex.

BLOOD TRANSFUSION

G. K. P. Henry: *Canadian M. Ass. J.*, 1920, x, 166. The indications for blood transfusion as given by the author are: (1) a deficiency in the quantity of blood as in posthaemorrhagic anaemia and secondard anaemias due to chronic sepsis; (2) a deficiency in the quality of the blood as in pernicious anaemia and haemolytic jaundice; and (3) a defiiciency in the clotting power of the blood due to a deficiency of thromboplastic substances such as is found in haemophilia.

In the author's opinion transfusion is most successful in post-traumatic anaemia and is of no benefit in shock without anaemia.

Infusions of gum arabic and saline solution are not beneficial as these substances are rapidly lost from the blood channels, they fail to increase the oxygen-carrying capacity of the blood, and they do not increase the haemostatic or haematopoietic functions of the blood.

Among the conditions for which transfusion is indicated are traumatism, gastric and duodenal ulcer, postpartum haemorrhage, ruptured ectopic pregnancy, typhoid haemorrhage, bleeding haemorrhoids, dangerous postoperative procedures, post-operative haemorrhage, jaundice, chronic sepsis, and poisonings due to benzol, illuminating gas, etc. It is of no value in acute sepsis or septicaemia.

Tests of agglutination and haemolysis are always necessary. Simple methods

have been devised for these tests. As occasionally the reaction of a given donor to a given recipient changes, it is advisable to make the tests before each transfusion. Citrated blood may be stored and kept for use up to four weeks after its withdrawal.

The citrate method of transfusion is the simplest and most adaptable. In the author's opinion Pemberton's method and apparatus give the most satisfactory results. The Kaliski needle, Gauge 11, can be introduced directly into the vein unless the patient is exsanguinated, in which case dissection of a vein is sometimes necessary. The citrate solution must always be freshly prepared and sterilized before the blood is drawn. An 8-inch rubber tube is attached to the needle and by this the blood is conducted to the beaker and kept away from the air. This tube may be filled with citrate solution to prevent clotting.

The mixed blood and citrate is run into the recipient's vein by means of a salvarsan set. The mixture may be kept for future use in an Erlenmeyer flask fitted with a two-tube cork. Air pumped into the flask through one tube increases the pressure so that the blood mixture is forced through the other tube into the recipient's vein.

The results obtained by transfusion are summarized as follows:

1. Following transfusion in cases of haemorrhage due to war wounds the patients recovered from shock, underwent major operations, and were evacuated to the base hospital in good condition. In addition to the tranfusion, the treatment included heat, rest, quiet, morphia and fluids by mouth and rectum.

2. Patients with anaemia due to disease were greatly benefited.

3. In pernicious anaemia transfusion was followed by great improvement in the general well-being and in the blood count but the fatal outcome was at best only postponed.

4. In cases of chronic sepsis the range of temperature was lowered and the body metabolism decreased.

The reactions following transfusion are often disagreeable and annoying but harmless and temporary. They occur in from 20 to 40 per cent of transfusions even when the recipient and donor belong to the same blood group. They are marked by a rise of temperature of 2½ degrees, chills, and vomiting.

Frequently repeated transfusions may result in haemolysis from the formation of iso-haemolysins. These reactions are not due to the citrate or the method but occur less often as the technique is perfected. They are due to the cellular elements of the blood.

Agglutination causes a rapidly increasing reaction in the first few minutes of the transfusion, usually as soon as 50 or 75 ccm. of blood have been injected. Hypodermic injections of adrenalin and atropine are of value in checking these effects. Haemolysis reactions rarely begin until fifteen minutes after the completion of the transfusion, usually later.

In haemorrhage of the new-born 10 ccm. of whole blood injected subcutaneously will usually be sufficient to stop the bleeding.

The donor may be any healthy person with a negative Wassermann test who belongs to the same blood group as the recipient. Only one of the author's donor's suffered even temporarily as a result of the transfusion. This man was affected with lassitude for several weeks after donating 850 ccm. of blood. One

patient died from arrest of kidney function with anuria and toxaemia due to haemolysis.—Ex.

The discovery by Dr. Hideyo Noguchi, at the Rockefeller Institute for Medical Research, of a vaccine for yellow fever, introduces a new factor in yellow fever control through the possibility of making persons immune to yellow fever by vaccination.

Heretofore, work in yellow fever control has been entirely that of prevention of infection by controlling breeding places of the mosquito which carried the yellow fever germ. The isolation of the yellow fever organism, however, has made it possible for Dr. Noguchi to develop a serum which it is believed will reduce the mortality from yellow fever and a vaccine which gives promise of protecting the non-immunes against contracting the disease.

Already vaccination against yellow fever of people going to tropical countries is being made in New York. This work is being done at the Broad Street Hospital with vaccine furnished by the Rockefeller Institute.

The first shipment of vaccine for yellow fever from the Rockefeller Institute to tropical countries was made a year ago when three hundred bottles were sent to Mexico. Other shipments have been made since then, the latest on November 10th. All vaccine supplied to Mexico is sent to the Mexican Department of Health which arranges for its distribution.

The Central American countries are so well convinced of the efficacy of Dr. Noguchi's vaccine that they are permitting travel without quarantine detention of those who have been successfully vaccinated.

Surgery

NEW USES OF THE SCROTUM

Johnson, J. E. (*South. M. J.*, 1920, xiii, 120.) Two cases are presented in which the redundant skin of the scrotum was put to novel uses. The first was a case of intractable pruritis ani in which the skin around the anus for about 2½ inches was thick, rough, and leathery from excoriation with the nails. It was necessary to excise the entire area and find a new epithelial covering for the raw surface. The scrotum was drawn well up and the incision made. When this flap was straightened out it was about 4 inches long and pendulous from its anterior side. The scrotum was closed with a few mattress sutures. An incision was then made entirely around the disease anal skin and the skin dissected down to the anal mucosa. This skin was folded together and passed through a median incision in the scrotal flap. The flap having been sutured in place, the anal mucosa was divided and sutured to it, the denuded area being thus covered. Union was primary and on the twelfth day the flap was separated from the scrotum.

The second case was a case of lymphoedema of the leg following an operation for right inguinal adenitis. During the operation the saphenous vein was injured and hemorrhage was controlled by sutures en masse. The leg remained swollen when elevated and it was necessary to find another course for the return lymph. The scrotum was not swollen. The operation is best described in the surgeon's own words: "The scrotum was divided in the median line, care being taken not to open the tunica caginalis. The left half of the scrotum was turned down and the end of the right half turned

into the left side, thus reforming the scrotum entirely from the right side. The left side now formed a flap 6 inches long with a base of 5 2-3 inches. To put this in place the skin of the perineum and an area of skin 4 by 5 inches extending into the right thigh were removed. The flap was now drawn across the denuded perineum and into the denuded area on the right thigh and sutured in place." Union was primary and at the end of two months all the edema had disappeared.

Book Reviews

International Clinics — A Quarterly of Illustrated Clinical Lectures and especially prepared original articles on Treatment, Medicine, Surgery, Neurology, Paediatrics, Obstetrics, Gynaecology, Orthopaedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners. By leading members of the medical profession throughout the world. Edited by H. R. M. Landis, M. D., Philadelphia, U. S. A., with the collaboration of C. H. Mayo, M. D., Rochester; Wm. S. Thayer, M. D., Baltimore; Hugh S. Cumming, M. D., D. P. H., Washington, D. C.; Frank Billings, M. D., Chicago; J. G. Clark, M. D., Philadelphia; A. McPherson, M. D., Toronto; Jas. J. Walsh, M. D., New York; J. W. Balentyne, M. D., Edinburgh; Chas. Greene Cumston, M. D., Geneva; John Foote, M. D., Washington, D. C. The J. B. Lippincott Co., Philadelphia and London, 1920.

This is one of the older publications of this character and is entitled to much credit for maintaining the high degree of excellence which has always characterized it. It being a collection of articles on various conditions met with by all practitioners of medicine and surgery. Of course among such a multiplicity of written articles of mediocre quality are found, offering nothing new or original nor a more attractive exposition of the old. However, it would be manifestly unfair not to state that the large majority of the matter presented is interesting, comprehensive, instructive and much value to the profession at large.

Massage and Exercises Combined — A Permanent Physical Curture Course for Men, Women and Children; 86 illustrations and deep breathing exercises. By Albrecht Jensen, formerly in charge of Medical Massage Clinic at Polyclinic Hospital and other hospitals, New York. Published by the author, 220 W. 42nd St., New York. Price $4.00.

In this volume the author aims to a new, novel method, devised by himself, of scientific massage with exercises combined so that the benefits of both "may be obtained simultaneously." Technique is plainly detailed in the text and simplified through the agency of numerous illustrations. A valuable guide applicable to the use of the layman as well as a textbook for the practitioner.

The Journal of Lab. & Clin. Medicine; C. V. Mosby Co., St. Louis, March, 1920. Chemical Changes in the Blood in Disease, by Victor C. Myers, Ph. D.

This is the introduction to a series of articles to appear in subsequent issues, on this subject.

The author calls attention to the fact that accurate data on the chemical composition of the blood, especially of the non-protein fraction, are of comparatively recent origin, and are primarily the result of American observations with the American methods. The practical information which these methods have

made available has been especially helpful, since they have given us very valuable data on just those conditions on which the older methods of blood examinations, cytology, bacteriology, serology, gave little information; reference is made principally to such constitutional conditions as nephritis, diabetes and gout.

Of the many methods of chemical examinations, and of the many substances investigated in the blood, only those which have proven of practical diagnostic and prognostic value are given.

In order are taken up the amounts of urea, sugar, CO_2 combining power, creatinine, uric acid, non-protein N, cholesterol, chlorides as Na Cl, and the diastatic activity, in health and in various diseases, which will follow in subsequent issues.

He employs colorimetric methods and for routine work employs the Bock-Benedict colorimeter, as being accurate, simple, rapid and inexpensive.

F. C. H.

New and Nonofficial Remedies

The following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies:

Calco Chemical Co.: Salicaine.

Coleman Laboratories: Bacillus Bulgaricus.

E. R. Squibb and Sons: Procaine, H. T. Procaine, Solution Tablets Procaine.

Winthrop Chemical Co.: Adalin Tablets 5 grains, Veronal Tablets 5 grains, Novaspirin Tablets 5 grains.

Lederle Antitoxin Laboratories: Typhoid Glycerol-Vaccine, Typhoid Combined Glycerol-Vaccine, Pertussis Glycerol-Vaccine, Pneumococcus Glycerol-Vaccine.

The Beebe Laboratories: Pneumococcus Vaccine No. 14, Typhoid-Paratyphoid Vaccine No. 39, Colon Vaccine (Acne) No. 11, Acne (Mixed) Vaccine No. 10.

Nonproprietary Articles: Phenetsal, Saligenin.

The Seydel Manufacturing Co.: Betanaphthol Benzoate, Benzyl Alcohol, Mercury (Mercuric) Benzoate.

The Abbott Laboratories: Acriflavine and Proflavine.

There are reported to be less than 300 doctors in all Serbia. Outside of the army medical forces, less than 2,000 physicians are available to care for the twenty-five million inhabitants of Poland. Additional schools are needed adequately to serve these countries particularly those of the south and east.

There is a five-year interruption of medical training in Europe which will affect the supply of physicians available during the coming generation. The instruction of adequate numbers of physicians for the years immediately ahead is essential.

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RAT BITE FEVER—A CASE REPORT

By Aaron Arkin, A.M., M.D., Ph.D.,
Professor of Pathology and Bacteriology,
West Virginia University,
Morgantown.

Read at Annual Meeting West Virginia Medical Association, Parkersburg, May, 1920.

Patient—An American boy, aged 9, was first seen by Dr. P. A. Gibbons, to whom I am indebted for the opportunity of studying this case, on April 8, 1919. The history was as follows: On March 25th the patient was bitten on the right index finger by a large grey rat while playing near his father's printing office. He reached his hand down into a barrel when the rat caught his finger, and according to the patient did not release its hold until it was killed by a person attracted by the screams of the boy. When the boy reached home the finger was painted with tincture of ioodine. After the bite he made no complaint and the wound seemed to heal nicely. On the fourteenth day he began to complain of pain in the finger and a burning sensation. The finger had become reddened and swollen. The physician was then called. He found the finger reddened, swollen, and at the site of the bite a slightly elevated blue-red papule surrounded by a lighter oedematous zone. The finger was painful on pressure. Examination revealed enlargement of the lymph glands in the right axilla. The supra-trachlear glands were slightly enlarged. The physician made an incision but no pus was found. The area was swabbed with tincture of iodine. The boy returned to school the following day. Three days later (17 days after the bite) he complained of not feeling well, and the physician was again called and again incised the finger, finding very little pus. The symptoms were drowsiness, weakness, headache, diarrhoea and vomiting. The gastric symptoms lasted for four days. The temperature on the 11th of April was 102 degrees F., and the boy complained of chills and went to bed.

The patient was seen by me on April 28th. On this day his temperature was 99 degrees. He had suffered three at-

tacks of fever accompanied by severe headache, nausea and vomiting, pains in the back and extremities. These occurred at intervals of six days and lasted two to three days. During the third attack he became dizzy and fell. He was then sent to bed.

Physical examination, April 28. Patient appears pale, rather thin and has anxious look. Temperature 99 degrees, pulse 90.

Finger — The right index finger is bluish-red, extending over the terminal phalanx. It is swollen and somewhat indurated. The incision has completely healed. On the right forearm can be seen several bluish-red, slightly elevated, well defined areas or nodules varying in size from ¼ to 1 inch in diameter. They are present on the flexor and extensor surface. Between them can be seen very faint reddish streaks. The supra-trochlear glands are enlarged, measuring almost an inch in greatest diameter. They are somewhat elastic and painful when compressed. The right auxillary glands are also large, about the size of a walnut and not very hard. On questioning the patient and mother I found that the skin nodules had first been seen about three weeks after the bite. A rash on the chest and abdomen was also reported to have been present. The rest of the body presented no eruption at this time. There was slight oedema of the lower eyelids.

Heart and lungs: Negative.

Abdomen: Somewhat distended; suggests slight ascites.

Liver: Edge can be felt along free margin of the ribs and flatness extends to fifth interspace.

Spleen: Not enlarged.

Lymph glands: Right axillary glands greatly enlarged, also supra-trochlears. Others are normal.

Head and neck: Negative.

Extremities: Negative, except for right arm already described.

Temperature: 99 degrees F.; pulse 90; respiration normal.

Urine: Amount normal; acid; clear; Sp. gr. 1.025. Albumen: trace. Casts: a number of hyaline and granular; R. B. C.: none.

Blood examination: April 28, 1919—

Erythrocytes	4,100,000
Leukocytes	16,000
Polynuclears	80%
Mononuclears	16%
Eosinophiles	4%
Hemoglobin (Sahli)	75%

Blood Smears—Smears of blood obtained by puncture of lobe of ear were stained with Giemsa stain, Wright's stain, Jenner's stain and India ink on April 29 when temperature had dropped to 99 degrees F. All examinations were negative.

Blood Cultures—On April 29 ten c. c. of blood was drawn from arm and three c. c. placed in 200 c. c. each of plain bouillon and glucose bouillon, and an equal amount in glucose agar (50 c. c.) for plating. The cultures were all negative aerobically. Unfortunately pressure of other work prevented animal inoculations at this time.

May 2, 1919, Temperature 98.6 degrees F.

Erythrocytes	4,600,000
Leukocytes	9,600
Polynuclears	70%
Mononuclears	27%
Eosinophiles	3%

Blood smears stained with Giemsa and Jenner stain were negative. Patient feels much better, but complains of weakness and loss of appetite. The skin nodules are much smaller and have

almost disappeared. The right axillary glands are still enlarged. No rash is present on the body.

May 10, 1919, I was called to see patient who had a severe chill and high fever on the evening of the 9th. Temperature 101 degrees F., pulse 100. Patient complains of nausea and severe headache. The nodules on right arm are somewhat larger than on the 2nd, and pressure on right axillary glands causes pain.

Blood examination:

Erythrocytes	4,400,000
Leukocytes	15,000
Polynuclears	75%
Mononuclears	23%
Eosinophiles	2%

Blood smears stained with Giemsa and Jenner failed to show any spirochetes after prolonged search. I inoculated two guinea pigs with blood obtained from left arm vein, using 3 c. c. intraperitoneally. The animals remained well for four weeks and showed no signs of illness whatever.

June 25, 1919. The patient feels much better but tires quickly. He complains of gastric disturbance. The nodules on right arm have entirely disappeared. The right axillary glands are only slightly enlarged. The oedema about the eyes has disappeared. The mother states that the patient has lost about 20 pounds during the illness. From May 9th to June 25th the patient has had two attacks of fever, but much less severe than earlier attack and lasting only a day or two. I have advised the administration of neosalvarsan intravenously. The patient has been treated symptomatically and given Fowler's solution, 3 to 6 drops, three times a day.

Sept. 30, 1919. Patient feels well. The glandular enlargement has disappeared, and patient has been free from attacks since July 28, when his temperature rose to 101 degrees F.

Blood examination:

Erythrocytes	4,800,000
Leukocytes	9,000
Polynuclear	76%
Mononuclear	22%
Eosinophile	2%

SUMMARY OF CASE

A boy, age 9, was bitten on the right index finger by a rat, which instead of disappearing, had to be killed in order to release it. The wound was shortly afterward painted with tincture of iodine and healed. After a period of fourteen days inflammation, oedema and induration occurred, accompanied by lymphangitis and lymphadenitis, and the appearance of blue-red exanthem. There were also high fever and chills, and gastric disturbance. This attack was followed by three others at intervals of about six days, each characterized by chills, fever, nausea, headache, and pains in the extremities. Reappearance of the exanthem with these attacks was noted. There was marked lymphadenitis of trochlear and axillary glands. Spleen was not enlarged. Slight nephritis existed. Blood examination revealed a leukocytosis, which reappeared with subsequent febrile attacks and returned almost to normal between paroxysms. Spirochetes or other organisms were not found in the peripheral blood, but patient was not seen until 34 days after the bite. Inoculation of two guinea pigs with blood obtained 46 days after bite proved negative. Cultures or animal inoculations were not obtained from skin nodule or local lymph glands. Blood smears made from ear failed to reveal any spirochetes on several examinations, the first 34 days after the bite (20 days after first paroxysm).

Subsequent history reveals recurring attacks of fever at longer intervals, and less severe. No attack has occurred in the last two months.

The case is typical of rat bite fever, and of special interest because it calls attention to the presence of rats infected with the virus of the disease in this community. A study of rats for the presence of Spirocheta morsus muris is now under way.

(This article will appear in full in Archives of Internal Medicine to which the reader is referred for bibliography, etc.)

INFANT FOODS AND INFANT FEEDING

By A. A. SHAWKEY,
Charleston, W. Va.

Read Before the West Virginia State Medical Association, Parkersburg, May, 1920.

The whole subject of medicine and surgery, as encompassed by the work of the general practitioner, is entirely too wide in its scope to be mastered by any one mind.

Infant feeding is in itself a subject sufficiently broad to justify the entire time of any one who might hope to master it. No one has as yet if indeed any one ever shall fully master the subject of infant feeding.

So what I shall have to say is not to be construed as criticism of the general practitioner, but as suggestion, which I hope will be helpful to him and through him to the defenseless little ones whose course is so rough and stormy through the first year or two of their existence.

As bearing upon the importance of proper feeding in early life I wish to read a few quotations from prominent pediatricians and others in this country and abroad:

"Experience has convinced me most firmly that rational feeding in infancy and childhood has a real bearing upon the development of physical and mental strength and of resistance to disease."—Vander Bogert.

"You can weaken a child for the rest of its life by the kind of food it receives the first year of its life."—Harvey Wiley.

"Seventy-five percent of the physical unfitness of the men examined for military service in the recent war was due to improper food."—Harvey Wiley.

"You cannot tell how well a baby has been fed until it is 30 years old."—Coit.

"Seventy-eight percent of cases of spasmophilia occur in children fed on artificial foods, while only two percent occur in children that have been breast fed."

"Lack of breast milk in infancy causes many of the imperfections of adult life and is manifest in the bony, muscular and nervous tissues."—Moore.

"Breast milk is the only food which stands both the chemical and biological tests."—Moore.

"Breast feeding will prevent more insanity than can be cured by all the insane asylums in the world."—King, of London.

"Every woman can nurse her baby. This is shown by our experience in France, Italy, England and America."—Moore.

I had my secretary to go over the first 1,000 case histories in my files and found that 410, or 41% of them were feeding cases, or cases ill because of errors in feeding.

I do not wish to be understood as condemning artificial foods as absolutely worthless; but to prove that they are not

far worse than worthless they must be used with understanding and discretion; and this does not mean "according to the directions on the package."

Artificial foods have some good points, and many bad ones; chief of which is that they contain a percentage of carbohydrates entirely too high and out of all proportions to the fats and proteids.

A physician can no more ethically prescribe a proprietary infant food without knowing exactly its contents and their proportions, or without having in mind a definite purpose to be met by each ingredient in the proportion in which his formula provides it, than he can ethically prescribe Peruna or Lydia E. Pinkham's Vegetable Compound.

To speak of any sugar or combination of sugars as an infant food is folly and untrue, and the same applies to baked wheat flour or any other prepared flour or mixture of flours, yet some of the oldest and most popular so-called infant foods fall under these classes.

Sugar is an essential element of infant food and Mellen's is a good combination of sugars, if used as such and in proper proportions but should not be called a food.

Baked wheat flour is a God-send and a life saver in certain conditions such as the gastro-intestinal disturbances of the hot seasons, but to speak of Imperial Granum or other prepared flours as infant foods is incorrect and unwise.

Proprietary Infant Foods come into five classes, according to their contents:

1. Condensed and Evaporated Milks.
2. Malted Foods.
3. Malted Foods Containing Starch.
4. Starchy Foods (containing practically nothing else.
5. Dried Milks.

The time allotted to this paper does not permit of a discussion of all the classes of proprietary foods, but as I consider the feeding of sweetened condensed milk one of the greatest if not *the* greatest menace to child life and health in West Virginia, I wish to discuss that subject briefly.

The composition of average mothers' milk according to the best analysis is: Fat, 2.75 to 4.65%; Sugar, 5.5 to 7.3%; Proteid, 0.9 to 1.8%.

The composition of sweetened condensed milk is, as it comes from the can: Fat, 9.0.....

Fat, 9.0%; Sugar, 55.0%; Proteid, 8.0%.

As prepared for feeding, according to the directions for Eagle Brand Milk, for a child 3 to 5 months of age—4 teaspoonfuls of Eagle Brand Milk to 5 ounces of water; fat, 9-11%; sugar, 5.0%; proteid, 8-11%.

It will be noticed that the carbohydrate and proteid percentages in this formula are not far from correct, but that the fat percent is entirely inadequate to furnish proper nourishment for the child, and a careful examination of children fed on such a food will quickly reveal the lack of proper nourishment in pallor, flabby flesh, malformed heads, beaded ribs, umbilical hernias, Harrison's groove, etc.

It will be noticed also that children fed on this class of foods are especially prone to illness and particularly resistant to treatment when sick, with a consequent mortality rate far in excess of the normal for breast fed infants.

Speaking of this class of foods Van der Bogert says "Carbohydrate excesses may temporarily satisfy the mother but end in disease and deformity." And my own experience amply corroborates this opinion.

There is but one perfect infant food and that is manufactured by the Eternal

God in the breast of the devoted and loving mother.

It is rarely necessary or advisable to take a baby off the mother's breast or to keep it off permanently even though necessary to take it off temporarily.

Infants have been put back on the breast after a period of 20 weeks, when the mother's breast had entirely ceased to secrete milk and have been successfully nursed again.

Indeed virgin old maids have successfully nursed babies; a good secretion of normal milk having been established by the stimulation of regular periodic nursings.

The baby's lips in sucking motion, together with complete emptying of the breasts at regular intervals are the best stimulants to establish or increase the secretion of mother's milk, and are the only true galactogogues known.

It is very rare that the poorest mother's milk is not better than the best substitute food. Trouble in breast feeding, when it exists, is generally due to the feedings and not to the food.

Next to woman's milk is cow's milk in simple modification with water and sugar in proper proportions and amount according to the age of the child. Milk Sugar is the most expensive and least satisfactory sugar. Dextri-Maltose is the best sugar.

If clean milk cannot be obtained it may be boiled which will make it safe if not decent, and perhaps even easier to digest. If necessary to use condensed milk use an unsweetened milk and add the proper amount of sugar.

If boiled food is used, vitamins must be provided, preferably in the form of orange juice, though tomato juice or potato water will serve almost as well.

The safest strength at which to begin cow's milk feedings is 1-3 milk; and increasing by 1 or 2 ounces, each day, in the whole day's formula, up to 2-3 milk; and later up to straight, unsweetened whole milk at eight months of age.

Sugar may be begun with ¼ or ½ ounce in the 24 hours formula and increased by a like amount every third day up to 1 or 1½ ounces per day, according to the weight and other conditions of the child. As a simple rule 1 ounce of sugar per day for a baby up to 10 pounds in weight, and 1½ ounces for a baby over 10 pounds will be safe and satisfactory. There are certain exceptions to this rule such as the athreptic or emaciated infant, when a much larger amount of sugar will be tolerated or even required, up to as high as 15%.

As to the interval at which an infant may be fed, two hours in the day time and three hours at night may be allowed for the first two weeks, after which time feeding should not be permitted oftener than every three hours in the day time with one night feeding, making seven feedings in 24 hours.

At four months of age and under no circumstances after six months the feeding should be made four hours in the day time with no night feeding. Five feedings in 24 hours.

For the amount to be given at each feeding, a simple and practical rule is to give 1 or 1½ (very rarely 2) ounces at each feeding, more than the baby is old in months, up to 8 ounces.

Too much emphasis cannot be placed upon the importance of feeding an infant at exactly the same hours every day. If baby is asleep, wake it up. In a few days a regular habit will be formed and baby will eat regularly, sleep regularly, grow properly and be happy and well.

Time does not permit of a discussion of the later feeding of the infant, but cereals should be begun at 9 months and

may be begun as early as eight months if the baby is not doing well on the breast or formula. Cereal gruels may be given in certain cases much earlier, but are generally not well digested by young infants except for short periods.

Any new food should be begun in small quantity—not more than one heaping teaspoonful, and may be increased by a like amount daily, or less frequently, up to 6 heaping teaspoonfuls, which is as much of any one food as should be given at one feeding. This applies of course to solid foods and not to milk, or formulas.

There is so much that might be said and that can be put in such simple practical form, that I would gladly speak longer but I must not encroach upon the time of those who are to speak after me.

INFLUENZA — PAST AND PRESENT

By H. E. GAYNOR, M. D.,
Parkersburg.

Read at Annual Meeting of the West Virginia State Medical Association, Parkersburg, May, 1920.

Out of the Ante-Deluvian Days was born a plague to scourge the people of that and future generations, so on down through the labyrinth of time — Influenza, harassing and death-dealing influenza has ever confronted the populace of every country of the globe. It threatens as the Sword of Damocles—the dread apparition hovers over all; awaiting the physiological moment when shorn of its spectral form, it becomes an animated, pulsating and definite pathological entity.

Father Noah and his Ark has been held culpable for the propagation of the causative factor of this disease, for is it not a Biblical fact, that all the members of the animal, reptilian, insect, etc., kingdoms, ascended to a place of security, designated for their habitation on board of that Grand Old Boat. So in the logical sequence of events, all forms of bacteriae took up their selected quarters, and waited patiently for the time when their liberation would occur. In delving in the Historic Lore of the Ancients, we discern that considerable space has been alloted to the narrations of pandemics, epidemics, endemics, etc., many of these descriptions bear a striking resemblance to those that are chronicled today, regarding Influenzal Visitations.

My first intention, in the preparation of this subject, was not to antedate the Fifteenth Century in my chronicological data, for by so doing, it would be practically impossible for me to remain well within the confines of veracity; for I would naturally like many others be inclined to consider all epidemics, endemics, etc., that of Influenza. Nevertheless, I deem it advisable, to recall to your memory, a few vivid descriptions of a disease that bears a marked resemblance to what is now designated as Influenza. Medical historians have interpreted the rather indefinite utterance of Hippocrates and Livy to a disease which assumed epidemic proportions in 412 B. C., as the first written allusion to Influenza. Again in the Sixth Century mention is made of an epidemic in which the prominent symptoms were: headache, debility, cough, coupled with an irresistible desire to yawn. Sneezing was the customary prodromal symptom — this gave birth to the expression—"God bless you;" same benediction is still extant.

It is highly probable, as maintained by some authors, that not a few epidemics described in earlier medical treatises un-

der various names, (catarrhal fever, Italian fever, etc.) were epidemics of Influenza.

The epidemic of 876 is said to have cost Charlemagne a greater toll, than the combined losses suffered by his victorious army during the Italian Campaign. An epidemic limiting itself to Germany and France in the Tenth Century is authentic; also the statement that the world enjoyed an immunity for two hundred years. Whatever may have been the nature of these early epidemics of Influenza, Wilson dates from the great visitation of 1510, this covered the whole of Europe and the British Islands, and was so general in its effect that not a single family, and in the majority of instances, the entire family were stricken.

Apparently the scourge was common in 1403, and in 1427, sermons had to be discontinued on account of the distractions suffered by the ministers of the High Church due to the incessant sneezing and coughing on the part of the congregation; masses in the Catholic churches of continental Europe could not be sung for the same reason. In 1557, the sittings of the Paris Law Court had to be suspended. This epidemic (1557), originated in Eastern Asia and spread rapidly westward, this is the first of which we have any knowledge that crossed the Atlantic and visited our own shores. This pandemic was extremely severe, the mortality rate exceptionally high, certain localities suffered severely. Five thousand died in Delph alone, within a short period.

During the reign of Charles II, year 1665, there fell on London the Great Plague, the mortality exceeding one hundred thousand for the year, at the peak of the epidemic more than one thousand succumbed daily. The quarantine was rigid if not effective. Picture in the archives of your memory that page of English history—retrospective of those plastic school days when you romped through Classic—lore—do you not descry mirrored upon the Screen of Yesterday—the narrow filthy streets of Old London, deserted, or only peopled with the driver of the dead cart and his assistants; and the only sound that broke the noctural silence was the shrill, heart-piercing cry of the driver, as he called out, "Bring out your dead!" The night watchman with his lantern—resurrected from the days of Diogenes — the cross painted upon the door of the plague stricken homes with the inscription calling upon the God of the Christian, "To have mercy upon them." The doors were made fast from without, and the watchman was dispatched to see that no one passed in or out; food was delivered by him. This is the initial quarantine of history. At first, those who died were buried in separate graves, but later huge trenches were dug and thousands were thus interred without shroud or coffin. London's population at this period was estimated at about 485,000. John Bell, clerk of the company (Parish's Clerks Company), who wrote an essay during this plague, had no records in his office of an earlier date than 1593; and he was not aware that his company had been engaged in registering births and deaths prior to that year. The Great Fire that occurred the following year 1666, destroyed all the documents of the Parish Clerk's Company, and its Hall in Silver Street, only printed tables from about the year 1700; these are still extant. Much has been written about the population of Medieval London, but little has resulted therefrom. The principal epidemics subsequent to 1665, were those of 1762, 1782, 1787, 1803, 1833, 1837.

During the past four hundred years, i. e., from the 15th to the 19th centuries, there have been about seventy epidemics of La Grippe, one-half of which from there widespread prevalence deserve to be designated as pandemics.

The cessation of these visitations were considered, during this period, to be due to abnormal static conditions contingent upon volcanic eruptions and earthquakes. The 19th century was marked by thirteen distinctive outbreaks; the pandemic of 1847, in which more than one-fourth the population of London and Geneva, and practically one-half that of Paris was afflicted.

The course of the later epidemics have been quite uniformly from East to West; of course only the general trend of the epidemic can be followed, as every locality invaded, becomes immediately a new center, from which the arms of infection reach out in every direction. With a few exceptions the later pandemics originated in Eastern Asia, where the disease may be considered endemic, from this nidus they travel westward across Russia, thence over continental Europe and Great Britain, across the Atlantic to America, thence westward to Australia and the Indies; until like Puck's girdle they encircle the globe.

The great pandemic of 1889-90, followed the customary path, the initial case of which we have definite knowledge originated in Bokhara, Central Asia, in 1889; the marked prevalence of the disease was noted in July and spread rapidly along the new railroad lines, thus invading the greater part of the Russian Empire. It was readily traced through Western Siberia, especially the Post-Towns and Stations of Russia, in its advance on St. Petersburg, (Petrograd); reaching Petrograd about the 20th of October, two weeks later it assumed such startling proportions in this city that it attracted the attention of the entire civilized world. In November it appeared in Paris, subsequent to its unprecedented spread in Western Russia, Central and Northern Germany, Austria and France; across the English Channel to the British Islands, invaded London early in December, thence to America; scattered cases being noted in New York about the middle of December; a week later it had assumed epidemic proportions in this city. From the seaboard it spread in all directions and in 1890 was diffused over the entire United States, British Northwest Territory, Sandwich Islands and Central America, (particularly severe in Guatamala). The mortality in the United States for period of 1889-90 exceeded 300,000, according to the available statistics, due allowance must be made for the inaccurate manner in which same were handled at this time. From its point of origin in Central Asia the epidemic extended in a south-easterly direction; Malta, Cyprus and Egypt were successively visited in January and February. It was reported from India in February, assuming epidemic proportions in March, and prevailed extensively in Upper and Lower Burmah during April and May, reaching Arabia in May, many pilgrims from India and the Straits having contracted the disease while enroute. In the Southern Hemisphere the course was from the south, northward, Cape Town being the seat of its initial appearance in Africa. South America was reached in February. Buenos Ayres was infected presumably by steamers from Bordeaux; thence it traveled up the coasts, and attacked Chile and Brazil; other South American republics were invaded in April and May. Marked severity in Pernambuco. Prevalent in Australia and New Zealand from

March to July; Iceland in July, and the remote parts of China and Kashmere during September and December.

During the summer and fall of 1890, influenza was "smouldering on," so discerned by the numerous local outbreaks, usually of short duration, in different parts of the world.

The second general epidemic—1891, began in January, and was perhaps a little less extensive and probably more fatal than the one just pictured. It, too, was a pandemic, but in its world tour, the course of its predecessor was reversed, and its general trend was from West to East. The origin is accredited to New Orleans, where influenza prevailed extensively and with high mortality during January, and from which hub it radiated in every direction; during February, March and April it spread over the northern states; was notably severe in Pittsburg and Chicago; by April it had reached the seaboard. Reports were received of its presence in England in April, Denmark and Scandinavia in July, Germany in August, from Russia in September, France in October, Italy in December; and thus transmitted from country to country until practically all the civilized world was re-visited. This epidemic completed its course in about one year.

Since 1889, each winter has brought a recurrence of this malady, varying in extent and severity, to all parts of the world. Few American cities have escaped an annual outbreak.

During the winter of 1892-93, only a few sporadic cases were reported. During the early part of 1901 and again in the winter of 1902-03, pandemic visitations of the disease occurred in America; 1909-10, outbreaks were reported practically from all the cities and townships of the United States. The mortality from this malady gradually diminished until the great pandemic of 1918-19, when according to reports it originated in Spain and spread with fulgurant-like rapidity through continental Europe to the embarkation points in France, and with unabated fury swept like an avalanche over the United States from the coast towns inland; again as in 1889-90, every section of the globe was visited, and the mortality exceeded that of all previous epidemic by a percentage too great to be authentically released. You are all thoroughly cognizant of the late epidemic, regardless of the fact that your practice was military or civilian, and therefore it is unnecessary for me to be pedantic enough to usurp valuable time by dwelling upon any particular phase of said epidemic. However, we are forced to admit that it shattered a number of proverbial theories, viz: mode of transmission, causative factor, period of incubation, virulence and susceptibility; the fatuity of quarantine; and on the other hand it has strengthened our ideas relevant to physic conditions; static phenomena are now considered in a minor role; whilst lessened resistance contingent upon environment and occupation enjoys stellar consideration; the augmented pathogenicity of the organism or organisms, (perhaps the toxicity of their viruses), after a prolonged period of quiescence. This particular phase bears a striking resemblance to the life-cycle of the seven-year cicadae.

The final curtain has not been drawn upon Influenza, let us sincerely trust that ere the dawn of another visitation, that Medical Science will have successfully demonstrated the causative factor of this pathological entity, and devise adequate means for its prevention and control.

AN OLD FRIEND IN NEW GARMENTS—BEING SOME OBSERVATIONS ON THE SUB-CUTANEOUS USE OF LOBELIA INFLATA.

By E. F. MOORE, M. D.,
Davis, W. Va.

Read Before Barbour-Randolph-Tucker Medical Society.

The number of drugs used by the medical profession for the cure or alleviation of disease, is almost numberless—the number which can be relied upon to give us fairly constant results in a given series of cases, is pitifully small. Many factors enter into our failures, among which may be mentioned the idiosyncracies of our patients, our lack of exact knowledge of pharmaco-dynamics, and our all too frequent and unfortunate resort to polypharmacy. The medical man who knows all there is to know about a single drug, is better equipped than his neighbor who has a perfunctory knowledge of a hundred. If a given drug will produce a desired result in a fairly constant manner, why prescribe five or six? Why not make the dose of the single drug heavy enough to accomplish our purpose and let it go at that rather than take the chances on combinations and chemical reactions about which we cannot always be sure? A heavy per cent of drug combinations are unfortunate and many are ridiculous. While filling the position of prescription clerk in my own drug store, I have compounded many prescriptions which exactly filled the Frenchman's description of the great American cocktail. He called it the "Grand Contradiction," and described it as being whiskey to make it strong, water to make it weak, lemon to make it sour and sugar to make it sweet.

In the early years of my practice I always carried a dose book in my pocket and invariably prescribed the minimum dose mentioned in the book. Later in life I discovered that the minimum dose recommended was frequently too large and the maximum dose often much too small and in neither case was the patient benefited. After many years of active practice I learned that the proper dose of any remedy is the amount necessary to accomplish the desired result. A sane hunter would not shoot at a quail with buck shot, neither at a bull moose with mustard seed, but would select his shell according to the game before his gun.

The medical man, given a clear vision of the pathological entity confronting him, and a fair knowledge of the possibilities of the ammunition he is going to use, is often converted from a nihilist to an enthusiast. I knew a hunter once who thought he recognized the flank of a deer through a small opening in the brush. He fired and killed his hunting companion, who was wearing a deer skin cap. The charge from the therapeutic gun often finds as undesirable a target and for the same reason—lack of exact knowledge as to what is before the gun.

Now I do not claim to know all there is to know about Lobelia. I wish I did. What I do know has been gained mostly by actual bed side experience, and this experience leads me to believe, or rather to know, that the drug is a very valuable one, and that it is not understood, or appreciated, or used by the general practitioner as it should be.

Down in the Ozark mountains in Southern Missouri, there is, or was in the early '90's, a class of medical men known as "corn field" doctors. They

were non-graduates, farmed for a living, and practiced medicine among their neighbors as a side issue. I recall with pleasure one of this class who frequently called me in consultation. He gave Lobelia for everything from coryza to consumption. I used to be vastly amused at his crudeness. I know now that he could have told me many things of real value had I taken him more seriously, for I am persuaded that there is not another drug in the Pharmacopea with which he could have secured such results as he surely did secure in his practice, or with which he could have done as little harm with his limited knowledge of the fundamentals of the practice of medicine.

Many who have used the remedy in a limited way, think of it only as an ingredient in certain cough mixtures. Under the head of "Physiological Action," Wood's Pharmacology notes that it has two characteristic effects, the first of which is a curara-like action upon the peripheral ends of the motor nerve, and the other a nicotine-like action upon the sympathetic ganglia. But it has a much wider range of action than this. It acts as a sedative, an anti-spasmodic, a stimulant, a relaxant, (both muscle and nerve), an alternative, and an eliminant, the last in my experience, being its greatest action. Whether Lobelia directly destroys toxins, or exercises within the system a powerful antitoxic action, or in some manner eliminates the toxins from the system, I think has not been determined—I do not know—but given a case such as we all so often see with deficient elimination and the usual symptoms of retained toxins, especially in the slow and chronic cases, and a few doses of Lobelia given hypodermically will do little short of a wonderful work.

Lobelia is not a cure-all, but it is an excellent remedy with a wide range of usefulness. It should be better known and more widely used. A few cases, given from my own experience, will probably illustrate its varied uses better than I could put it in any other way.

My first experience with Lobelia subcutaneously, was in 1912, in a case of membranous croup. I had called a neighboring physician in consultation and he suggested the remedy at once. At first I objected, thinking he wished to induce emesis with the idea of clearing the larynx temporarily, and this procedure, in my experience, is very bad practice. When, however, it was explained to me that this was not the object, and that the remedy would not produce emesis, I consented to its use and a 30 minim dose was given, the patient being four years of age. The doctor left me a supply of the medicine and suggested that 30 minims be given every six hours until there was a decided change for the better. This decided change for the better occurred soon after the exhibition of the third dose, and was so marked that I really thought the malady was conquered. The patient was quite comfortable all the afternoon and up till near midnight, when the breathing again became labored, and after that the treatment seemed to have no effect, although the remedy was given in larger doses and at shorter intervals. The patient died on the evening of the third day.

My second case of membranous croup occurred in Davis in the fall of 1918. Patient was about 16 months old, and the case was well-marked. A 30 minim dose of Lobelia was given at 10 p. m., and repeated at 6 a. m. By noon the labored breathing was relieved and did not return. Patient made quick and perfect recovery.

In May, 1917, was called to see a patient whom the messenger said was be-

lieved to be dying, and I was urged to make all haste possible. On arrival I found my patient, a woman apparently about 40 years of age, pulseless, pale, and cold as ice. Husband informed me that she had had similar attacks before but never so severe. From the husband's description of the onset, I made a snap-shot diagnosis of angina pectoris, and quickly as possible filled my syringe to capacity with Lobelia and shot it into her arm. Ordered hot packs and sat down to watch developments. At the end of an hour there was no noticeable change, so I again filled my syringe to capacity and emptied it into her arm. Twenty minutes after the second dose, pulse became perceptible, body gradually grew warm, consciousness returned, and at the end of the second hour patient was free from pain with pulse and respiration normal. Subsequent history confirmed diagnosis of angina.

In September, 1917, was called to see a 3-year-old boy whom I found in strong convulsions. Mother informed me that the boy was in the third week of whooping cough, and that he had passed from a paroxysm of coughing into a convulsion. Gave 20 minims of Lobelia and repeated in half an hour as there had been no change. Tension gradually relaxed and in about twenty minutes patient passed into a state of apparently natural sleep. At 10 p. m. he was still sleeping. When I called to see him next morning he was out in the yard playing. There had been no return of the convulsions, and later I learned that there had been no return of the severe paroxysms of coughing.

During the summer of 1915 I experimented with the drug in two cases of Jacksonian Epilepsy, one patient being a boy of 12 and the other a man of 30. Gave the boy 30 minims once a day, the man 60 minims. The boy was not benefited in the least. After a month's treatment the man showed marked improvement, and passed a period of four months without a seizure. Lost sight of him for a time but learned from his father some months later that the attacks had returned about two months after the treatment had been discontinued.

In acute attacks of asthma, Lobelia seems to me to be as near a specific as anything we have in medicine. I have never failed to relieve a case quickly when a proper dose was given. And just here I think it would be well to note that Lobelia belongs to the Tobacco family, and if your patient is a user of the weed it will take much larger doses to get results. For tobacco users I always give the maximum dose and repeat one-half in 30 or 40 minutes if necessary.

As an anti-spasmodic, Lobelia is a powerful and harmless remedy, relieving spasmodic pains due to menstrual disorders, bowel disturbances, colic and similar complaints without the bad after-effects of morphine.

I have had many failures in my experience with the remedy, but am sure that many of them were due more to my lack of skill and knowledge than to lack of virtue in the drug. After the exhibition of the largest doses I have yet to see a single bad result which could be traced to the drug. I have never had an abscess, and have never had a patient to vomit or even complain of nausea.

What I wish to bring out in this paper is this: In Lobelia, given sub-cutaneously, we have a valuable remedy that is not used as much as it should be, and one that should be given more study and trial.

PAPER BY DR. A. H. GRIGG
Beckley, W. Va.

Read Before Raleigh County Medical Society, Dec. 17th, 1920.

In taking up the case I wish to discuss with you this evening, I will state that I think it one of very material interest both professionally and socially — one which each of us should be vitally interested in and one which by unselfish and sincere co-operation of the society as a whole, some measure may be thoroughly discussed and the result applied in a practical way to bring about improvement in this long standing and very chronic condition. Our society has now been organized for a number of years during which time several men have affiliated themselves with the society to the extent of their yearly dues (this often being due to the persistence of the secretary). Some of our members, I believe I am correct in saying, have never attended a meeting. Let me ask the question of each individually and collectively—what is the trouble? Our convalescence is being delayed too long. What shall we do first—not what we shall do. Other societies smaller than ours prosper, have larger meetings, better papers and more of them. Members of these societies have a personal interest in the society and consider it a privilege to be a member rather than a burden. They put something IN and consequently get something OUT. The papers they prepare shows evidence of study, are received enthusiastically and discussed with a view to really getting something from them.

To me the greatest and most persistent contributory cause to the poor mechanism of our society is lack of attendance by members; second, lack of "pep and push" in those who do attend. We are all too willing to agree with the other man provided it is the track of least resistance. When put on for papers the too frequent and *inexcusable* excuse is lack of time. Again a member accepts an invitation to read a paper and puts off preparing same until the time of the meeting and then because he has no excuse he weakens and stays at home rather than report unprepared; third, some of our members I fear consider time spent at the meetings wasted, the discussions, opinions and conclusions are without value. This is true just so long as the individual harboring such an idea holds his own precious knowledge a secret. A tribute to one of our greatest teachers of the present day runs as follows:

"Yet each man following his sympathies,
United himself, assimilating all.
Using men's thoughts and from as steps
to rise,
Who speaks at last his individual word,
The free result of all things seen or heard,
Is in the noblest sense original.
Each to himself must be his final rule,
Supreme dictator to reject or use,
Employing what he takes but as his tool,
But he who self sufficient dares refuse,
All aid of man must be a God or Fool."

During the next year let us work with more enthusiasm, attend meetings regularly and when called upon COME PREPARED. Excuses have been too frequent and the contagion has spread rapidly. Our resistance is low. We have no leucocytosis. Our immunity must be raised. I know of no better way to do this than free discussions between members. Making reports to the society after attending societies and meetings in medical centers. I would suggest that our surplus funds be spent in getting men of recognized ability and authority to dis-

cuss topics with us, especially along lines of refined diagnosis. Money spent improving our diagnostic appetite will be more profitable than appeasing our gastronomic cravings. Worshiping at the shrine of Bacchus is a wonderful pastime but entirely devoid of any cerebral stimulation.

It has been suggested and approved that when a member is put on for a paper that he notify the secretary one week in advance of the meeting at which the paper is to be read of the subject; the secretary will then notify the members so that discussion may be more liberal and intelligent. This has not been done in the past. Make our meetings worth while so our secretary will not be ashamed to report them to the State Association through the pages of our Journal.

REPORT OF THE COMMITTEE ON THE WORKMEN'S COMPENSATION FUND

This report was read at the Clarksburg meeting. A number of the points raised have since that time been corrected. It is published at this late date in order that the transactions of the Association may be completed in the Journal.—Ed.

Soon after our last annual meeting I was urged by the State Hospital Association to read a paper at its annual meeting on the subject of The Relation of the State Compensation Commissioner and his Office to the Hospital and Physician. I accepted the invitation particularly because at that meeting the Commissioner was expected to be present. In fact he was put down on the program for a paper to immediately follow my own. The two papers were expected to represent both sides of the matter. The meeting took place last December in Charleston. Unfortunately, the Commissioner was not there at that time. However, after some effort the Commissioner's secretary joined us. I read my paper. The complaints contained therein were reinforced by others present. The secretary's reply was that part of our troubles was due to the imperfections of the law as it stood, and the rest was due to the doctors themselves because they do not always furnish sufficient information to the Commissioner's office. The Hospital Association appointed a committee of which Dr. MacQueen was chairman for the purpose of amending the Workmen's Compensation law so as to remove the obstacles which seemed to be in the Commissioner's way to deal more reasonably with the workmen, the doctors and the hospitals. I deem it best to read to you my paper of that meeting, adding some comments either as I go along or at the conclusion of it. It was as follows:

THE RELATION OF THE STATE COMPENSATION COMMISSIONER AND HIS OFFICE TO THE HOSPITAL AND PHYSICIAN

There are three distinct elements in the sociologic function of the state as evidenced in the Workmen's Compensation scheme, viz., the workman, the compensation commissioner and the compensation law. I am naming them in the order of their importance. The main object of this scheme is to help the workman in time of need in a manner to make him free from the need of charity on the one hand and from the trouble and uncertainty of help through litigation on the other. The workman is the hub of this whole undertaking. The compensation commissioner is only second in importance is important at all only in so far as he serves the workman in this scheme, but he is more important than the law. For a good law may be vitiated by poor administration and a bad law may be

mitigated and rendered serviceable by wise administration. The law itself is, of course, of importance in so far as it furnishes a technical foundation for the whole scheme. Virtually, however, the law is nothing more than a crystallized expression of the commonwealth's idea to help the workman under certain circumstances, so that, if the law is the practical foundation of his scheme, back of it, as a ground to stand on, is the idea of helping the workman. This idea while it may logically figure as a fourth element in this scheme in reality it resolves itself into the vital principle of it all without which all the other elements become merely dead anatomical organs or mechanical contrivances devoid of activating dynamic force. The hospital and physician have no separate place in this scheme, they are merely an incident to the first element of it. While as progressive citizens we are profoundly interested in the successful working of this scheme in all its phases, on this occasion we are naturally concerned solely with this incident. To be sure, in the practical working of this scheme it constitutes not only an important but an indispensable incident. The injured workman must have surgical and hospital services and the commissioner would be helpless without them to establish the fact of injury, the nature and extent of the same and the duration of the disability. But officially we, the subjects of this incident, have no status. The compensation law does not direct the employment of a physician for the injured workman, it merely provides that the commissioner *may* pay for the services of such if he sees fit, and even then this pay need not necessarily be given direct to the physician or hospital. The commissioner, too, has not seen fit to give us an official status in his regulations and their application. I have often thought he could have included the physicians and the hospitals among his agents, thus establishing an official connection which, I believe, would have proven to the advantage of all concerned. But perhaps this could not be done. During the recent past, however, his office has gone a step further by going on record, that strictly speaking, we are a dispensable incident, at least in so far as recognizing any financial responsibility to pay for any surgical or hospital services in any case whatsoever. This brings me to the subject of my paper as announced in the title. Perhaps I can accomplish the purpose of this paper best by cataloging some of the experiences and ideas that we have all had more or less in our dealings with the State Compensation Commissioner and his office, some of them as commendations and others as criticisms.

1. The elimination of the requirement of an affidavit to physicians' and hospitals' bills has saved some considerable annoyance and trouble and has removed the appearance of distrust which it implied. I am confident that the Commissioner never regretted this step. It has certainly added much to the physicians' desire to co-operate with him.

2. When the Commissioner first published his schedule of fees and made it a part of the official papers in each compensation case, physicians and hospitals suffered loss and annoyance because it unwittingly gave the impression that this schedule definitely proclaimed the value of all services. The workman and his employer refused, for instance, to recognize any financial obligation above $25.00 in the case of a laparatomy, or $15.00 in the case of a fracture of the femur. Worse yet, an idea was spreading abroad that the Commissioner's schedule of fees is to become the conven-

tional standard for surgical and hospital services in non-compensation cases as well. We all appreciated greatly when the Commissioner agreed to and did insert a note to the printed schedule which has helped to do away with this injustice. To my mind, however, that note is not written in as plain language as it ought to be. The language is rather involved and gives the impression of grudging. Only recently one of the Commissioner's field agents disputed to me the meaning of that note and emphatically declared that under the law and the Commissioner's regulations surgeons have no right to collect in a compensation case any pay above the schedule fees, and I am told that he has gone so far as to spread this view among the workingmen.

3. In raising the hospital rate to $16.00 per week the Commissioner deserves credit for the interest shown in our hospitals under the trying circumstances of war times. The hospitals all over the country have raised their rates. I am not sure, however, but that this raise under the maximum limit of $150.00 has not done an injustice to the surgeon, especially to such who do not own the hospitals with which they are connected. It has always happened off and on that after the hospital was paid there was nothing or little left of the $150.00 to apply on the surgeon's fees. With the raise in the hospital rate this has become more frequent. The true remedy, of course, lies in amending the law so as to enable the Commissioner to expend more than $150.00 in each case if necessary. Should such an amendment fail to pass, I respectfully submit the hospital rate question should be reopened and a decision shall not be arrived at until the physicians of the state, perhaps as represented by the West Virginia Medical Association, should be consulted as well as the West Virginia State Hospital Association.

4. The fee schedule is incomplete, inadequate and imperfectly balanced. It is certainly incomplete when the arduous services rendered in the case of an extraperitoneal rupture of the bladder or of urethra, caused by a fractured pelvis have to be included in the services rendered to the fracture or to have it itemized as a first dressing at a maximum of $2.00 or $4.00. It is inadequate when, for instance, the extremely taxing and prolonged services in a fracture of the femur are awarded $15.00 when no operation is performed; and it is improperly balanced when, for instance, the amputation of a finger which will require as much preparation on the part of a surgeon as for a laparatomy and will consume at least an hour or more of his time, is awarded $2.50, while the treatment of a fractured rib which usually requires no more than about ten minutes of time and comparatively speaking a mere trifle in skill and exertion, is awarded $5.00.

5. The attitude of the Commissioner's office against the workmen's privilege in many places to choose the hospital he is to go to is a source of irritation to hospitals and physicians. Even when the injured workman happens to be close to a state hospital there is at least some room for doubt whether it is right for the Commissioner's office to insist that he must go to that hospital and no other, and if for any administrative reasons this is deemed wise it is difficult to understand why in such cases the Workmen's Compensation Fund should not pay such hospital in the same way as it does hospitals elsewhere. Such a policy seems to be contrary to one of the fundamental principles of the workmen's compensa-

tion scheme, viz., that the burden of its financial support be carried by the industries concerned and not by general taxation. I spoke thus far of cases occuring close to a state hospital. What objections I have raised are, as you have noted, of little if any concern to the injured workman, for it is to be presumed that the care they receive in the state hospitals is as good as they receive in other hospitals, but when the injured workman is at a distance from a state hospital and time and suffering can be minimized and safety increased by taking him to a nearer institution, then it is of great concern to the industrial victim. It is, therefore, very difficult to understand why the commissioner's office insists and without qualification that such cases should be taken to state hospitals. I have in mind the case of an accident in which death occurred from shock while in transit to a state hospital which was at least four hours away and requiring a change of cars and a long wait for the train when he could have been taken to a hospital only half an hour away. This was quite a while ago. Recently in talking to a physician who was at one time connected with a state hospital he told me that he knew of several cases which came to that hospital from a distance and proved fatal which might have been ended otherwise had they been transported to nearer institutions and received earlier attention.

6. In the Commissioner's schedule a considerable section, under the heading of "Miscellaneous," is devoted to the subject of dressings of wounds, specifying several varieties and implying others by "etc," and itemizing the fees for first dressings and for after dressings. That such provisions should have been made is, of course, very obvious. In many surgical cases dressings constitute the sole character of the surgical services required, while in others they constitute the treatment after an initial operation. Surgical dressings, of course, vary in character and extent. Very often a surgical dressing requires as much time, labor and skill as a good sized major operation, while there are dressings of a comparatively very simple nature. In any event, however, they are services that can not and should not be rendered by any one other than a physician or surgeon and I believe that this is the practice all over this state. If a nurse does make a dressing it is either under supervision or instruction or with the authorization of the attending surgeon. In either case the surgeon bears the responsibility both legally and morally and consequently is entitled to compensation. A fact to be particularly borne in mind is that no well regulated hospital in this state includes in its rates medical and surgical services. Even where the surgeon is the owner of the hospital the charges for surgical services and hospital services are distinctly apart. It is true that some hospitals include in their rates dressing material and commonly express it for brevity's sake by the word "dressings." The Commissioner in his schedule under the head of "Hospital Rate" make use of the word dressing obviously in this sense. By no stretch of imagination could one understand it in any other way, first, because, as already stated, no hospital in the state includes surgical services in its rates, and, second, because in this very same schedule the Commissioner has provided an elaborate provision for the payment for dressings when this word is understood to mean the treatment of the wound by the surgeon. All this, by the way, is quite within the scope of the dictionary's definition. Gould's dictionary thus defines

"dressing:" "1. The application of various materials for protecting a wound and favoring its healing. 2. The material so applied." I am dwelling upon this very elementary discussion of a self-evident subject to emphasize how strange it is that the Commissioner's office should have repeatedly refused to pay for surgical dressings made by surgeons on the alleged ground that in paying the hospital rates in these cases dressings were already thus paid for and citing for its justification the paragraph on the schedule of fees which under the head of "Hospital Rates" reads, "A maximum rate of $16.00 per week, this to include bed, board, dressings, etc." It will sound stranger yet if I tell you that the attitude of the Commissioner's office on this item has not always been the same in all cases. For instance, in the hospital with which I am connected, within about the same period of time one doctor rendered a bill for surgical dressings made by him and was paid for them without controversy. Another did the same and was paid for them only after controversy. Still another did the same and payment was permanently refused. About that same time an inquiry brought information that at St. Mary's in Clarksburg and the Ohio Valley General in Wheeling no such difficulties had been encountered. What does all this mean?

7. Payment of bills has been refused to at least one hospital surgeon who rendered services to a workman, on the ground that the workman was entitled to the company physician's services. In one instance, the case was one in which the upper chest and shoulder were caught between car-couplings, and the company physician, fearing injury to the shoulder joint of a nature that his limited experience could not detect in the presence of much contusion and swelling of the soft parts, referred him to a surgeon of greater experience. The surgeon diagnosed the absence of injury to the joint and sent the injured man back to the company physician. The surgeon's fee for consultation in this case was refused. Another instance was of a man with an inflamed knee in the early stages. The surgeon to whom the case was referred by the company physician ordered the man to a hospital where he treated him. Both surgeon and hospital were refused payment in this case.

Inasmuch as the Commissioner's office is paying right along to hospitals and surgeons for services rendered to workmen who are entitled to the services of contract physicians, the refusal of payment in these and other cases logically suggested that the Commissioner's office has some line of demarcation between cases which in its judgment are entitled to hospital treatment and special surgical skill and those which are not. I believe that one may be pardoned for questioning the right of anybody at a distance to overrule the physician on the spot as to whether a given case should receive the benefit of hospital facilities and special surgical judgment or skill. I, therefore, respectively submit that the commissioner's office was wrong in refusing payment in these cases. But right or wrong, the refusal of the Commissioner's office to announce some rules on this subject is doing an injustice to hospitals and surgeons. While in some cases it is still possible to collect the charges from the patient when finally informed by the Commissioner's office that it will not pay them, in most cases collection by that time is impossible. It has been my experience in hospital work especially that the time to collect the charges is before the patient leaves the hospital. At one time I took the liberty of pressing this con-

sideration on the Commissioner's office, asking that in all fairness information be given us on this point so as to enable us to guide ourselves accordingly. The information was not vouchsafed.

8. I believe that I have said enough to indicate to you what I meant when I said in my introductory remarks that the Commissioner's office seems to consider the hospital and physician as a dispensable incident in the scheme of workmen's compensation. I will now close this paper by placing before you a very remarkable statement from the Commissioner's office which will perhaps even more clearly bring out this point. In a letter from the Commissioner's office under date of Dec. 8, 1917 is contained the following: "Technically speaking, the provision of section 27, 'entitled to hospital treatment by reason of his employment or otherwise' would eliminate payment to all hospitals, as all employees in the state of West Virginia are entitled to hospital services at the state hospitals without further charge to them, and any payment made to the hospital for services rendered to employees is what might be termed a donation arbitrarily given by the Commissioner." While I lay no claim to any qualifications as a lawyer, I respectfully submit that that interpretation is palpably erroneous. For, if this is the intention of section 27, then any talk whatever in the same section about payment to hospital and doctor is contradictory and not in a small measure stultifying. When this act was passed the three state hospitals were in existence and, therefore, if the word "otherwise" referred to them, then why in the name of common sense was there made any provision whatever authorizing the Commissioner to pay anything to anybody? If I were to interpret the word "otherwise," I would say that it clearly refers to contract treatment not connected with employment. For instance, the workman may be entitled to contract treatment furnished by a lodge. In any event, it is disagreeable, to say the least, to think that the relation of the hospital and the physician to the Commissioner's office is that of recipients of charity.

I hope that the Commissioner will take these criticisms in the spirit of fairness in which they are made and the commendations as genuinely sincere. I share the general opinion that the Commissioner has been striving to treat the hospitals and the physicians in a fair and intelligent manner and believe that he will be glad to correct these apparent irregularities of his office when his attention is properly directed to them.

COMMENTS

Since then the law has been amended so as to enable the Commissioner to pay out for medical, surgical and hospital expenses an additional $150, if in the Commissioner's opinion the severity of the case justifies it. The obnoxious word "otherwise" has been eliminated. Since then the Commissioner also has revised his schedule of fees upwards. All this is in the nature of progress in the right direction, and I am sure that we are all ready to accord the Commissioner all due credit for his part in this progress. The improvement in the law, however, will amount to little or nothing unless the Commissioner will interpret and administer the law in a broad and sympathetic manner. Above all things what we are particularly in need of are definite instructions or regulations from the Commissioner's office so that we would know where we stand in every given case at the beginning of it. As it is, we are often left in the dark for weeks and months after the completion of the case. By that

time the patient is out of reach and the payment for services is lost. Here is a concrete illustration. During the past winter we had two certain patients who were entitled to workmen's compensation. We got paid by the Commissioner for services to one of them, and refused for services to the other, on the ground that that patient could have obtained free treatment at the Fairmont state hospital. These patients came from the same place, worked for the same company, both had fractures of the tibia and their injuries occurred only a few days apart. Unless the Commissioner reconsiders his decision, we will probably lose our pay.

Grievance No. 5 in my paper stands unrelieved. It doesn't seem fair that the Workmen's Compensation Fund should not pay for cases treated at state hospitals. But be that as it may, the attempt to force injured persons to travel longer distances in order to reach a state hospital when a shorter one would bring them to other hospitals as good is incomprehensible. However, since coming to this meeting I saw a letter from the Compensation Commissioner, under a recent date, in which he very clearly promises to give the workman the privilege to go to any hospital he wishes to in the absence of any special contract. Should this become an accomplished fact, it will prove a great boon to the injured employees, and, incidentally, will remove the worst source of irritation between the doctors and the hospitals on the one hand and the Commissioner's office on the other.

Grievance No. 2, also, remains unrelieved. The Commissioner should not hesitate to state plainly in connection with his schedule of fees that these fees are not intended to express the full value of the services rendered, explaining that they are what they are because of the law's limitation as to the maximum amount which can be expended in a given case. The statement now printed at the head of the fee schedule conveys this only by implication.

Gentlemen, the Workmen's Compensation is steadily growing to be a larger element in our work and I believe we should devise some plan by which our legitimate interests should be protected in a more effective manner than can be done by a mere committee. Jointly with the Hospital Association we should employ some one to look after these matters.

WM. W. GOLDEN,
Chairman.

RUPTURE OF THE RECTUM DURING LABOR

By A. J. NOOME, M. D.,
Wheeling, W. Va.

Read Before the West Virginia Medical Association, Parkersburg, May, 1920.

The case reported by Lee Dorsett of Saint Louis in a recent issue of Surgery, Gynaecology and Obstetrics throws so much light on this subject from different authors that I have taken the liberty of quoting his article verbatim:

"There are numerous instances in the literature of rupture of the rectum but in a careful search of the standard books on obstetrics and rectal diseases, I have been unable to find a case occurring during labor. In a personal letter from Joseph B. DeLee, of Chicago, he stated that he has never seen a similar case.

Wallis (1) states that certain rectal strictures are due to pressure of the child's head during labor; Fulton (2) reports a positive case of stricture of the

rectum following a prolonged labor; Tuttle (3) mentions perforation of the rectum in cases of stricture of the rectum due to syphilis, but no mention is made as to its occurrence during delivery.

As syphilitic stricture of the rectum occurs mostly in women, it is remarkable that this accident is not more frequent during child birth. It can be readily seen that as the rectal wall above the stricture is dilated and weakened, and that as there is generally a condition of coprostasis present, the pressure of the foetal head descending would cause a pressure on the accumulated faecal material which, unable to pass downward, because of the stricture, bursts through the rectal wall.

In the case herein reported we were in the dark as to the exact condition. Rupture of the uterus was suspected. As the woman was in such profound state of shock, an exploratory laparotomy was contra-indicated. A rectal examination threw no light on the condition as the perforation was far beyond the reach of the examining finger.

Patient, female, age 37, entered hospital in a state of profound shock. Pulse 156, temperature 102, respiration 42. Skin gray, lips cyanosed, and face covered with perspiration. Abdomen greatly distended. She gave the following history:

Family history: The mother and father are living and well. The husband is in good health. The patient has had three children, all living and well.

Present trouble. The patient was delivered at her home 30 hours prior to entrance to hospital. A low forceps operation was performed and almost immediately after the delivery of the child the patient complained of severe pain in her left side and soon afterward began to show signs of shock. Twelve hours later she developed abdominal symptoms and was sent to the hospital. The general physical examination was negative. The abdomen, as stated before, was greatly distended, tympanitic except over uterus which gave a dull area one hand's breadth above symphysis. The distention of the abdomen was so great that the skin was broken in several areas. The vaginal examination revealed a soft, boggy, puerperal uterus, and a recent bilateral laceration of the cervix, also a recent perineal laceration. Slight lochia but no odor and negative on microscopic examination. Leucocyte count 21,000. Rectal (low) examination was negative.

Subsequent history. No definite diagnosis was made except that there was a peritonitis present. Three hours after entrance the patient had an almost imperceptible pulse. Temperature 104.8°, body surface cold and clammy. Condition of patient gradually became worse and she died 12 hours after entering hospital. Her last temperature before death was 107°.

Postmortem examination by Dr. F. A. Baldwin. Acute diffuse fibrinous peritonitis; rupture of rectum at the recto-sigmoidal junction; old stricture of rectum (syphilitic); postmortem uterus; cloudy swelling of liver and kidneys; acute congestion of spleen, oedema of lungs, acute dilatation of heart; no perforation of vagina; appendix negative; recent laceration of the perineum."

The report of my case is as follows: A Polish woman, age 43, mother of 11 children, 3 children dead and 8 living. All children delivered by midwives. Present labor was first in which it was necessary to call physician. I had known the patient for five or six years. Had been called to treat different members of her family. It was never necessary in

this period to prescribe for mother. As far as outward signs might go she was in perfect health at all times; she did all her own house work and I would say went into her last labor in perfect health. I was called to case about 4 a. m. Was told by attending midwife that patient had been in labor from 11 p. m. Midwife also stated that while the pains seemed strong enough the labor for the last two hours did not seem to make any headway. Vaginal examination showed a head presentation, head fairly low in pelvis in right oblique position. After observing the case for a half hour I decided that she would need assistance. Accordingly axis traction forceps (Ale Wees) was applied to the head without any difficulty. Now the writer is in full agreement with those who teach that no greater force than that which can be supplied from arms and shoulders should ever be used when making traction in any case of labor. In other words no fixation of the feet or knees or any other part of the physician's body should ever be used when making traction with the forceps. Anesthesia was not used. Traction was applied with the pains. The first pull on forceps seemed all right. With the second traction a crunching sound was transmitted to the ears and forceps. I thought at the time that the symphisis had broken or fractured subcutaniously. At the next traction I was amazed to see the omemtum protruding from the rectum. Each traction of the forceps increased the amount of omentum protruding from the rectum until the head was born and placenta delivered. This case occurred in January, 1920 The child was living and unharmed and is at present in perfect health. An examination of the entire vaginal tract and perineum by a consultant and myself showed them to be intact. In other words we were sure that we had to do with an intraperitoneal lesion and that no gross obstetrical error had been committed. After the expulsion of the placenta I reduced into the rectum all of the protruding omentum. The patient had no pain, nor was she shocked nor did she make any complaint other than any other recently delivered woman might make. At the consultation we decided to rest our case on the view that the omentum would plug the opening in the rectum with less risk to the patient than an abdominal section would do. In closing I am free to confess that this was faulty reasoning. Our patient should have had the benefit of an immediate abdominal section. In other words we violated that great life saving abdominal law which says and commands that all suspected injured of ruptured abdominal organs should have the life saving benefits that can only come from an immediate abdominal section. Our patient died of septic peritonitis in 60 hours. An autopsy was refused. If the writer were asked do you think syphilis or cancer was present in the rectum he would say no. To have an accident like this to occur in the absence of any gross obstetrical sin is hard to believe. We can't help but think there was some pathological change or disease to produce the textural changes in the rectum that would permit such an accident. My own view is that the rectum was loaded with feces with possibly a long meso-rectum that would allow the junction of the sigmoid and upper rectum to prolapse into the pelvic cavity in the form of a festoon. Of course this is pure guess and in closing my one regret is that the poor woman did not get the benefit of abdominal section. And that I have no autopsy report to give you as to the point of rupture.

Announcements and Communications

To the Editor:

The New York Committee on After-Care of Infantile Paralysis Cases published and distributed the report of "The Survey of Cripples in New York City."

Our aim has been to send this report to those in a position of responsibility in agencies for cripples and to all those who might have a general interest in cripples, and in plans for their aid. The undersigned would be glad to know of any one who has been overlooked and would appreciate suggestions for further possible distribution of the report.

ROBERT STUART, *Director*
N. Y. Committee on After-Care of Infantile Paralysis Cases.
69 Schermerhorn Street,
Brooklyn, N. Y.

Dr. T. W. Moore, of Huntington, was elected vice president of the First National Bank of Kenova at the recent meeting of the directors.

Dr. H. M. Coleman, of Matewan, has purchased a residence in Huntington and it is understood will move to that city.

Dr. W. W. Golden, of Elkins, has returned from the east, where he spent some time recently.

The date for the meeting of the West Virginia State Medical Association at Pence Springs has been named as the fourth week in May.

The Health Department of the State of New York reports that during 1920 information was received from seventy-six districts in thirty-six counties that medical service was inadequate or not procurable. In Delaware County alone nine townships were in need of medical service. The population of these districts ranges from 500 to 6,000, and in most instances the nearest physician is from 5 to 10 miles distant. Forty-seven districts have been supplied with medical service, leaving twenty-nine communities still in need of such service.

The Local Committee on Arrangements for the annual session of the American Medical Association to be held in Boston, June 6-10, announces that it will gladly co-operate with those who want to arrange for meetings of special groups of physicians during the coming annual session.

Any who may be interested in arranging for reunions of medical officers who served during the World War, for class meetings, for alumni reunions or for other similar social functions, are requested to write to Dr. Beth Vincent, chairman of the Subcommittee on Reunions, addressing him at the central office of the Local Committee on Arrangements, Boston Medical Library, 8 The Fenway, Boston 17, Mass.

The U. S. Public Health Service has requested Congress to appropriate a contingent fund of $355,000 for the control of bubonic plague at the ports of Boston, New York, and other points on the Atlantic Coast.

The West Virginia Medical Journal

JAS. R. BLOSS, M. D., Editor
C. R. ENSLOW, M. D.
J. E. RADER, M. D. Assistant Editors

Huntington, W. Va., February, 1921.

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All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. Tbe expense is small to the author—the satisfaction is great for tbe editor and printer.

ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: 804 Lincoln Place, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. Tbe author or communicant shall be held entirely responsible.

OFFICERS OF THE STATE ASSOCIATION

PRESIDENT—J. Howard Anderson, Marytown.

FIRST VICE-PRESIDENT—H. E. Gaynor, Parkersburg.

SECOND VICE-PRESIDENT—S. G. Moore, Elkins.

THIRD VICE-PRESIDENT — Charles O'Grady, Charleston.

SECRETARY—Robert A. Ashworth, Moundsville.

TREASURER—Hugh G. Nicholson, Charleston.

DELEGATE TO A. M. A. 1920-1921—H. P. Linz, Wheeling; Alternate, J. E. Cannaday, Charleston.

DELEGATE TO A. M. A. 1921-1922—Jas. R. Bloss, Huntington; Alternate, W. W. Golden, Elkins.

COUNCIL

FIRST DISTRICT—C. G. Morgan, Moundsville, one-year term; H. P. Linz, Wheeling, two-year term.

SECOND DISTRICT—J. C. Irons, Dartmoor, one-year term; C. H. Maxwell, Morgantown, two-year term.

THIRD DISTRICT—C. R. Ogden, Clarksburg, one-year term; L. H. Forman, Buckhannon, two-year term.

FOURTH DISTRICT—G. D. Jeffers, Parkersburg, one-year term; W. S. Link, Parkersburg, two-year term.

FIFTH DISTRICT—J. E. McDonald, Logan, one-year term; E. H. Thompson, Bluefield, two-year term.

SIXTH DISTRICT—R. H. Dunn, Charleston, one-year term; J. W. Moore, Charleston, two-year term.

LOST BATTALIONS!

It is earnestly requested that you turn to the preceding pages and, if you have not already done so, read the paper presented to the Raleigh County Society by Dr. Griggs.

From time to time comment has been made through these columns concerning the lack of interest taken in the affairs of the State Association, and the activities of component societies during the interim between the annual meetings.

For a number of years past the enthusiasm and high class of matter presented at the annual gatherings of the parent organization has been truly remarkable and has occasioned surprise as well as much favorable comment from distinguished visitors from other states. These things give us a feeling of pride, naturally.

But why is it that when we have returned home that this interest and enthusiasm so suddenly disappears? Surely it cannot be that all at once these brilliant essayists retire to their hermitages and hide from the men whom they meet at their county society meetings their talents and clear ideas.

Then what becomes of these men who have good ideas as to the manner of awakening the interest of the local members and tell us of the excellent meetings their society has and of the enlightening discussions.

Then again where have those fault-finders gone, who complain that the County Society Reports and State News columns are not up to the standard which should be maintained, who promise to "see to it that our secretary sends in reports and I'll send in news notes each month."

There are sections of the state from which there has not been a County Society Report for more than a year, some not for two years. These are not the small societies of the rural districts, either, Fellow Members, but among the most populous. The societies are among the largest in the State Association and hold meetings each month, some of them twice during this time. Yet the few news items we are able to get from these districts comes from a personal friend here and there or the pages of some medical journal received in exchange. For example it is learned through the Journal of the A. M. A. that one of our West Virginia physicians died last October! Recent news, isn't it?

There are some of the county secretaries who are interested and who do assist in an effort to make your Journal of interest to you. To them thanks are given for without their assistance our efforts in this line would end in total failure.

It is passing strange, Gentlemen. Will some of the brethren who are members of these "Lost Battalions" enlighten us upon the etiological factors producing this marked apathy toward our Journal.

A LEGAL DEFINITION OF CHIROPRACTIC

Frequently physicians are asked to give a definition of the above. Formerly it has been somewhat of a difficult matter for us to give a comprehensive one to our questioners. From this time on it will be easy to give a very clear and lucid one since the legislature of the state of New Jersey has recently passed a chiropractic bill.

There is the probability of a bill of this same class being presented to the legislature of this state during the present session.

In order that a clear understanding as to just what is meant by the term chiropractic may be had by the members of the legislature and the medical profession the definition as given in the bill is presented. It is as follows:

"The term chiropractic when used in this act shall be construed to mean and to be the name given to the study and application of a universal philosophy of biology, theology, theosophy, health, disease, death; the science of the cause of diseases, and the art of permitting the restoration of the triune relationships between all attributes necessary to normal composite forms, to harmonious quantities and qualities by placing in juxtaposition the abnormal concrete positions of definite mechanical portions with each other."

INFLUENZA

It is not intended to enter into a discussion of this "much discussed" disease. Since 1918 medical literature has abounded with articles dealing with it from every conceivable angle.

Since early Fall we have been seeing persons who have presented a fairly uniform group of symptoms; whose ailment

seems to pursue a fairly definite course and among whom there is quite a marked frequency of acute myocarditis.

These patients complain of a sense of chilliness rather than a distinct rigor; there is a moderate rise of temperature, in our experience seldom reaching 103° F., and an increase in the pulse rate rather out of proportion to this elevation; malaise is marked and there is the complaint of a generalized soreness of the whole body rather than an aching. Marked disturbances of the gastro-intestinal tract are noted in the majority, usually nausea with at times vomiting and generally constipation is complained of. But the observation of greatest interest has been the marked loss of strength of the heart muscles itself and the suddenness with which this develops early in the illness. The systolic pressure measuring 100 m.m. or less with a correspondingly high diastolic reading.

Is this Influenza a presenting still another "set" of symptoms, as it were? Are members of the profession in other sections of the state encountering these patients?

Let us hear from you.

State News

Dr. James Putney, of Charleston, spent Christmas week in New York City.

At a recent meeting of the Kanawha County Medical Society, Dr. John Cannaday was elected president, and Dr. E. Bennette Henson, secretary.

The United Mine Workers have purchased a lot and contemplate building a hospital in Charleston.

Dr. John E. Cannaday, of Charleston, attended the Southern Surgical Society meeting which was held recently at Hot Springs, Va.

Drs. S. W. Bull, of Spencer, and Ray Kessel, of Ripley, have located in Charleston and opened offices in the Day and Night building.

Dr. I. C. Hicks, of Huntington, accompanied by his wife and daughter, left January 20 for a sojourn at Palm Beach, Florida.

Dr. H. D. Hively, of Charleston, has announced that he will limit his practice to obstetrics and diseases of women.

Dr. Fred F. Holroyd, who has been with the U. S. P. H. S., and stationed at Nitro, has entered the field of industrial medicine and is with the Raleigh-Wyoming Coal Co., at Glen Rogers, W. Va.

Dr. E. R. McIntosh, of Elkins, left on the twenty-fifth of January for New York, where he will devote five or six weeks to advanced clinical work at the New York Eye and Ear Infirmary. Mrs. McIntosh will accompany him. They will be housed at the Irving on Gramecy Park. Dr. G. L. Pearce, of Elkins, will have charge of the practice of Dr. McIntosh during his absence.

A SUGGESTION

To prove the efficacy of our advertising pages, you might send to The Abbott Laboratories, Chicago, for a free sample of AROMATIC CHLORAZENE POWDER, (Council-Passed). This Dakin antiseptic is excellent for use as a gargle, mouth wash, and spray.

Dr. Oppenheimer, Chief Surgeon of the C. & O. Ry., of Richmond, was a recent visitor in Huntington.

Dr. H. D. Hatfield, of Huntington, was elected president of the Ohio Valley Bank, at a meeting of that institution.

Dr. and Mrs. Okey M. Staats, of Wheeling, who were recently married and have been registered at the Commodore hotel in New York, will, after spending a short time in Washington and Baltimore, go to St. Petersburg, Florida, for an extended sojourn.

APPROPRIATIONS FOR MEDICAL ACTIVITIES

MEDICAL HISTORY OF THE WORLD WAR

The Sundry Civil Appropriation Bill, just reported to the House, contains an item of $50,000 for continuing the work of compiling the medical history of the World War, which is under the direction of Surgeon-General Ireland and Col. Charles Lynch.

FATE OF INTERDEPARTMENTAL SOCIAL HYGIENE BOARD

The Interdepartmental Social Hygiene Board requested $2,246,924 to carry on its work against venereal diseases during the next fiscal year, but the appropriation was entirely eliminated from the Sundry Civil Bill by the House Committee on Appropriations. This board will cease to function unless the Senate provides the necessary funds, which in the present year amounted to $1,015,000. Opposition to the continuation of the board is attributed in part to the fact that it duplicates work performed by the Public Health Service.

PUBLIC HEALTH SERVICE ACTIVITIES

The bill authorizes the expenditure of $200,000 by the division of veneral diseases of the Public Health Service, although $336,715 was requested for the next fiscal year. The bureau asked for $50,000 for health education, and $200,000 for the control of influenza and other epidemic diseases, but these amounts were refused. The House Committee granted only $50,000 for the control of biologic products, the amount allotted during the current fiscal year.

The sum of $80,000 is provided for the maintenance of a home for lepers, including transportation of lepers, maintenance and care, and pay of necessary officers. This home has been located at Carville, Louisiana.

James Bedford Lockridge, Minnehaha Springs, W. Va.; University of Maryland, Baltimore, 1885; aged 58; died recently.

Edgar U. Parsons, Piedmont, W. Va.; Medical College of Virginia, Richmond, 1865; aged 82; a member of the West Virginia State Medical Association; surgeon in the Confederate service during the Civil War; died, December 20.

The next annual congress on medical education and licensure is to be held at the Congress hotel, Chicago, March 7, 8 and 9, 1921. A joint program will be participated in by the Council on Medical Education and Hospitals of the American Medical Association, the Association of American Medical Colleges and the Federation of State Medical Boards of the United States. Reports will be presented from fifteen committees on suggestive courses of graduate training

in the various specialties; reports on the medical curriculum will be presented by several committees dealing with the clinical subjects of the medical course, and other papers will deal with the National Board of Medical Examiners and with problems of special interest to state licensing boards.

Dr. C. F. Hicks, of Welch, surgeon in charge of the Miners' Hospital, is attending the Mayo clinics at Rochester, Minn.

Dr. and Mrs. Fred C. Marcum, of Ceredo, have announced the marriage of their daughter Eunice Victoria to Mr. James William Hicks, on January 12.

Dr. O. F. Covert, of Moundsville, is in Baltimore doing special work on tuberculosis.

Dr. C. F. Fortney, of Hundred, is doing post graduate work in Baltimore.

Dr. Benjamin F. Bone, of Moundsville, is a business visitor to Lake Odessa, Michigan.

George F. C. Yost, Rivesville, W. Va. (license, West Virginia, 1904); aged 44; died, October 23, from injuries received in an automobile accident.

One of the most promising movements inaugurated by any American city for an intensive educational attack on cancer was that formed in the city of Cincinnati on November 4th, 1920. This organization known as the Divisional Council on Cancer Control was launched under the joint auspices of the City Health Department, the Academy of Medicine, and the Public Health Federation, and is financed by the Council of Social Agencies of the Federation. The work of this Council is to be undertaken by a Committtec of Fiftcen, of which Dr. J. Louis Ransohoff is Chairman.

Dr. Charles A. Pryor, who has been located in Philadelphia since returning from France, where he saw service with both the British and American forces, being connected with a mobile operating unit, has located in Huntington and will be associated with Dr. R. J. Wilkinson, surgeon in charge of the Chesapeake & Ohio hospital. Offices will be maintained at the hospital. Dr. Pryor is a graduate of Jefferson Medical College, Philadelphia, and received his surgical training in Philadelphia and New York hospitals.

Dr. Irvin J. Carlisle, who has been located at Clay, is now at Elkhurst.

Dr. A. L. Amick, of Charleston, has returned from his former home in Fayette county, where his brother died recently as a result of a fall from a horse.

Dr. Harlan H. Staats, formerly of Spencer, has located in Charleston,

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Dr. G. B. Capito, who formerly had charge of the medical work of the White Sulphur Springs Company, has opened offices in the new Professional building, Charleston.

Dr. C. M. Brown, of Mount Hope, is now at Yolyn where he is doing contract work for five coal operations.

Dr. and Mrs. R. M. Hoffman, of Summerlee, spent sometime recently with relatives in Woodstock, Va.

Dr. S. E. Massey, formerly located at Bramwell, W. Va., has removed to Martinsville, Va.

Dr. H. H. Jones, of Doe Hill, Va., has retired from active practice and is located at Dunmore, W. Va.

Dr. J. S. Klump, of the Guthrie hospital, Huntington, has returned from Detroit, where he took a four weeks' course in gas anesthesia.

Society Proceedings

MEETING OF CABELL COUNTY MEDICAL SOCIETY

The Cabell County Medical Society met at Hotel Frederick December 26, 1920, 8:30 p. m. W. C. Swann, acting secretary.

No minutes read because of absence of secretary.

The business of electing officers taken up.

Nominations for President: Dr. Truehart Taylor, by Dr. Wilkinson. Moved and seconded nominations be closed and a unanimous ballot cast.

Nominations for Vice President: Dr. Walter C. Swann, by Dr. A. K. Kessler. Moved and seconded nominations be closed and unanimous ballot cast.

Nominations for Secretary: Dr. F. C. Hodges, by Dr. Taylor. Moved and seconded nominations be closed and unanimous ballot cast.

Nominations for Treasurer: Dr. Frederick A. Fitch, by Dr. Hawes. Moved and seconded nominations be closed and unanimous ballot cast.

Dr. Fitch reports about $36.00 balance in the treasury and requests a committee to audit books if a report is wanted.

Nominations for Censor: Dr. Vest. Moved and seconded nominations be closed and unanimous ballot cast.

Delegates to State Society at Pence Springs: Dr. A. K. Kessler, Dr. Wilkinson and Dr. Pepper were unanimously elected.

Dr. Ashworth, at Moundsville, should be informed of the names of our delegates.

Dr. Taylor takes the chair and leaves the meeting to the will of those present.

Dr. Bloss says the cost of the State Journal has doubled and that the printers have been losing about $80.00 an issue for some time. The cost of the Journal will be about $3.00 per member this year and we are requested to get some new advertisers. Also to mention the Journal ads when ordering through ads in the Journal.

Motion to adjourn.

W. C. SWANN,
Secretary Protem.

December 14, 1920.

Fayette County Medical Society met at Thurmond, Tuesday, December 14, at 8 o'clock p. m., with the following members present, viz: Drs. Skaggs, Grose, Hopkins, Hogshead, Henley and Goodman.

There being no papers, the following physicians were duly elected members of the Society: Dr. M. A. Moore, Kingston, W. Va.; Dr. Samuel R. Fairchild, Cunard, W. Va.

Officers for the year of 1921 were elected as follows: President, Dr. H. C. Skaggs, Montgomery; First Vice President, Dr. E. E. Jones, Mount Hope; Second Vice President, Dr. L. S. Henley, Elverton; Secretary-Treasurer, Dr. H. L. Goodman, McKendree; Censors, Dr. C. W. Lemon and Dr. Ralph Hogshead.

On motion of Dr. L. S. Henley, seconded by Dr. E. J. Grose, it was decided to hold meetings in the future every two months instead of monthly.

There being no further business meeting adjourned to meet at Thurmond, second Tuesday in February.

H. L. GOODMAN,
Secretary-Treasurer.

The Lewis County Medical Society convened in regular session in the State Hospital Clinic Room, Tuesday, Dec. 14, 1920, with Dr. Mortimer D. Cure, President, in the chair.

By motion, which was unanimously carried, the regular routine of business was dispensed with and the election of officers for the ensuing year was taken up with the following results:

President, Dr. E. T. W. Hall, Weston, W. Va.; Vice President, Dr. F. C. Heath, Weston, W. Va.; Treasurer, Dr W. H. Green, Weston, W. Va.; Secretary, Dr. G. M. Burton, Weston, W. Va.; Censor, Dr. J. G. Petitt, Weston, W. Va.

Dr. Mortimor D. Cure was made the next delegate to the state convention with Dr. George Snyder alternate.

Dr. O. L. Hudkins was received into the Lewis County Medical Society by transfer from Braxton County. Dr. Hudkins recently located in Weston, W. Va.

A committee composed of Drs. King, Law and Petitt were appointed to draft resolutions concerning the death of one of our members, Dr. Woodford Hinzman, of Terra Alta, W. Va.

Dr. E. T. W. Hall offered a suggestion that an effort be made to organize a Monongalia Medical Society, including the counties of Marion, Harrison, Lewis, Upshur and Taylor, same to meet three to four times a year. Dr. Hall was appointed as a committee of one to correspond with the Societies of the above counties concerning this step and report at the next meeting.

The Society of Lewis County was honored with the presence of Dr. S. H. D. Wise of Parkersburg, who made a very interesting as well as amusing talk, which was well received.

The meeting was honored also, by the presence of Dr. Foreman, of Buckhannon. Dr. Foreman also responded by making a very clever talk.

At this the annual gathering of the Lewis County Medical Society, a five course dinner was served at the Camden hotel from 2 to 5 o'clock p. m. The wives of the physicians were present at the luncheon.

G. M. BURTON,
Secretary.

The Marshall County Medical Society will meet Tuesday, January 11th, at 4:15 p. m.

(1) Paper—"Headaches"—By Dr. A. F. Compton.

(2) The election of officers for 1921.

Come, for the members of the society will want to honor you with an office; or you will be anxious to vote for some one who loves the Society and his fellow practitioners and *who recognizes that there is a responsibility that goes with each position and is willing to do service* for the honor bestowed upon him.

The privilege of membership carries with it obligations to attend its meetings regularly; "to promote friendly intercourse among physicians; to guard and foster material interests of its members and to protect them against any imposition so that the profession may become more capable, honorable and useful to the public."

Every physician would want to belong to a medical society. Some physicians

are perfectly willing to allow their fellow practioners carry on the society for them and give no aid in extending medical knowledge, advancing medical science and securing the enactment or enforcement of medical laws. The next session of our legislature is upon us. Three advertising Chiropractors are in our town and one of our fellows is a member of the legislature. We have an opportunity for serving mankind and should meet it at our January meeting.

Our membership dues should be paid at once so that we may have advantage of the mal-practice law, keep our Journal going and for fear we will neglect our County, State and National dues too long. Last year some few of you were annoyed about your Journal because you neglected to pay your dues and I had to send in dues to our State Secretary seven times. The State Association has honored our Society by electing one of its members Councilor and another Secretary and they would be "happy indeed" for the first forty-five certificates of membership in the State Association to be issued to the Marshall County Society. Pay your dues now and help put a bigger star in front of our name on the map of the West Virginia Medical Association.

Yours fraternally,
ROBERT A. ASHWORTH,
Secretary.

January 1, 1921.

The Little Kanawha and Ohio Valley Medical Society met in regular session with the President presiding.

The minutes of the previous meeting were read and approved.

The following members were present: Drs. Gaynor, Jeffers, Crooks, Muhleman, Brown, Giltner, Ferrell, Rose, Casto, Wise, Prunty, Stone, Miller, Boice, McQuain, Paden, Bush, Richardson, Frame, Conley, of Elizabeth, Wirt County, W. Va., and Dr. Carl F. Raver of the State Department of Health.

Dr. R. H. Paden, formerly of Akron, Ohio, but now located in Parkersburg, was elected to membership.

Officers for the year 1921 were elected as follows: President, M. R. Stone; First Vice President, H. E. Gaynor; Second Vice President, Orva Conley, Elizabeth, Wirt County, W. Va.; Third Vice President, E. S. Goff, Spencer, Roane County, W. Va.; Secretary-Treasurer, W. B. Richardson; Councillors, Crooks, Casto and Grimm.

No further business to come before the Society the meeting was adjourned to meet again at the regular meeting Feb. 3rd, 1921.

W. B. RICHARDSON,
Secretary.

Moundsville, W. Va.,
January 14, 1921.

The W. Va. Medical Journal,
Jas. R. Bloss, Editor,
Huntington, W. Va.

Dear Doctor:

At a meeting of our County Medical Society, Jan. 11, 1921, the following officers were elected for this year:

President, Dr. A. F. Compton, Moundsville; Vice President, Dr. A. L. Fortney, Hundred; Secretary, Dr. D. B. Ealy, Moundsville; Treasurer, Dr. O. P. Wilson, Moundsville; Delegate, Dr. Harriet Jones, Glendale; Delegate, Dr. L. H. McCuskey, Moundsville; Alternate, Dr. Will Crow, Glen Easton; Alternate, Dr. W. P. Bonar, Moundsville; Censor, Dr. J. W. Rickey, Moundsville.

Dr. J. D. States was elected as an honorary member for life.

This Society went on record as favoring a vital statistics law and are writing

our Senators, Delegates and State Board of Health to that effect.

We are bitterly opposed to the licensing of chiropractors and we are writing our State Board of Health demanding that something be done immediately to rid Moundsville of the three that are practicing in our midst.

I have the honor to be,

Very respectfully,

D. B. EALY, *Secretary*

Marshall County Medical Society.

Fairmont, W. Va., Jan. 21, 1921.

Dr. Jas. R. Bloss,

Huntington, W. Va.

Dear Doctor:

At the last meeting of the Marion County Medical Society the following officers were elected for the coming year:

President, Dr. L. D. Howard; Vice President, Dr. C. M. Rammage; Secretary, Dr. J. B. Clinton; Treasurer, Dr. C. W. Waddell.

Dr. J. H. Brownfield, Fairmont, W. Va.; Jefferson Medical College; aged 84; charter member of the State Medical Society and Marion County Medical Society, and oldest practitioner in Fairmont; died January 19.

Very truly yours,

J. B. CLINTON,

Secretary.

Moundsville, W. Va.,

January 14, 1921.

Whereas we have three advertising chiropractors in our county who fake the public, prey upon their ignorance, charge exorbitant prices, treat classes of cases for which they should be prosecuted for mal-practice, and

Whereas, the public, the State and the Nation look to the vast army of the organized medical profession to protect their interests;

Therefore, Be it resolved that the Marshall County Medical Society, composed of its forty-five members from the counties of Marshall and Wetzell, ask our two Senators, two Delegates and our State Board of Health to use their influence to secure legislation to rid this state forever of the chiropractors and to secure the passage of an adequate vital statistics law. If we have any laws against chiropractors we ask that the President of the State Board of Health take the necessary steps to have them enforced immediately.

MARSHALL COUNTY MEDICAL SOCIETY.

By D. B. Ealy, Secretary.

REPORT OF LAST MEETING FOR 1920 BY RALEIGH COUNTY MEDICAL SOCIETY.

The regular monthly meeting of the Raleigh County Medical Society met at the home of Dr. K. M. Jarrell, Friday evening, Dec. 17, 1920, at eight o'clock. The following members were present: Drs. K. M. and D. B. Jarrell, Cook, Hume, Smith, Grigg, Stansbury, Wriston and Dupuy. This being the time to elect new officers for the ensuing year, the following were elected:

President, Dr. E. S. Dupuy, Beckley; Secretary, Dr. Charles S. Smith, Beckley; Vice Presidents, Dr. B. W. Eakin, Tams; Dr. G. W. Johnson, McAlpin; Dr. A. H. Grigg, Beckley; Censors, Dr. D. B. Jarrell, Beckley; Dr. W. W. Hume, Beckley; Dr. M. C. Banks, Raleigh; Delegates to State Medical meeting, Dr. F. H. Sisler, Eccles; Dr. J. A. Campbell, Beckley; Alternates, Dr. G. C. Merriman, Raleigh; Dr. A. G. Bowles, Glen White.

The Society passed a resolution pledging their hearty co-operation with the Woman's Club in selling Red Cross

Christmas seals to aid in the work in fighting tuberculosis. The Society bought and paid for a fifty dollar bond.

Excellent papers were read by Dr. Chas. S. Smith, on "A Discharging Ear," and Dr. A. H. Grigg on "The Society Both from a Professional and Social Standpoint." A vote of thanks were tendered Dr. and Mrs. Jarrell for the delightful refreshments served and their splendid entertainment.

FRED S. STANSBURY,
Secretary.

Medicine

VACCINES IN FURUNCULOSIS

A. Matte (*Presse medicale*, January 24, 1920) uses stock vaccines for curative purposes and autogenous vaccines subsequently to prevent return of the trouble. Sterilizations of vaccines by addition of 0.5 per cent of phenol—without heat—is recommended. In the curative treatment, specialized stock vaccines for different types of cases are used, viz., separate vaccines for cases of carbuncle, furunculosis of the eye, folliculitis of the nose, tuberculous abscess, etc. Each of these special vaccines contains a number of strains of staphylococci from cases of the corresponding clinical type. Where prompt results are required, as in carbuncle, painful furuncle, or furuncle with a large, doughy surrounding zone of hyperemia, Maute begins with an intravenous injection of ten million staphylococci, which causes no systemic reaction, but reduces pain, induration and progress of the lesion within one day. Next day, fifteen million, and on the third day, twenty million, are similarly given, followed after two more days by another twenty million. This concludes the curative treatment, and three days later the prophylactic treatment is begun. In cases in which intravenous administration is not required, subcutaneous injections of the specialized stock vaccines in doses of 250 and 500 millions are given on alternate days. Prophylactic vaccination consists in giving subcutaneously an autogenous vaccine containing 500 million germs to the mil. The first injection consists of one half mil. Three days later, one mil is given; four days later, 1.5 mils; five days later, two mils; five days later, two mils, and seven days later, two mils. If, during the process, a large, painful furuncle appears, one or two intravenous injections of ten millions are given and two supplementary subcutaneous injections of two mils each are given at ten day intervals. While dieting, even strict, fails to benefit in some cases, in other diminution of bread and interdiction of starches and chocolate has seemed useful. Giving six to eight drops of hpdrochloric acid during meals, and one gram of powdered charcoal, with 0.01 gram of ipecacuanha, at the end of the meals, also appears serviceable. In chronic furunculosis patients are often fatigued and depressed. Even in these cases vaccines apparently constitute the best remedy. Tonic medication may be added, but arsenic should not be used. Locally, little save protective treatment is required. To prevent extension of infection, a powder consisting of two or three parts of copper sulphate to fifty parts of zinc carbonate, to be thoroughly rubbed into the surrounding skin with a compress, is best. Incision and cauterization are painful as well as useless. In lesions in the later stages, puncture with a fine galvanocautery point is sufficient and gives relief, even in carbuncle. The vaccine eliminates the need for crucial incisions in carbuncles, except in certain diffuse, rapidly spreading lesions. Ex-

tension is generally arrested much more quickly by the vaccine than by surgical treatment.

SODIUM CACODYLATE AND SODIUM HYPOSULPHITE IN DERMATOLOGY

P. Ravant (*Presse medicale,* January 28, 1920) has for one year been trying injections—usually intravenous—of sodium cacodylate in ten per cent solution in various skin diseases. Hypodermic injections of 0.1 to 0.3 gram of the compound are first given, and if well borne, intravenous injections are at once proceeded with. Cases of eczema refractory to all treatments for months or even years were relieved by these injections, either permanently or with the aid of further injections given at increasing intervals. Beginning with doses of 0.3 or 0.4 gram, the amount is progressively augmented until one gram or even grain is being given in twenty-four hours. The average duration of treatment required was three weeks, fifteen to twenty grams of sodium cacodylate being given in divided doses daily or in larger doses every three or four days. In a few patients, chiefly children, small, repeated doses of calomel by mouth were combined with the cacodylate treatment, causing rapid disappearance of eczema where arsenobenzol injections had already failed. Sodium hyposulphite was used intravenously in a variety of skin affections, with considerable success. The pure drug was injected in daily amounts of four to fifteen grams, dissolved in water in a twenty per cent solution. Smaller doses were used at first to test the patient's sensitiveness to the remedy. Sometimes the drug was given instead by mouth, the solution used being made up of one part of the hyposulphite to five parts each of syrup and distilled water. Good results were thus obtained in various erythemas, urticaria, furunculosis, eczema, artificial dermatitis, and strophulus. Pityriasis versicolor gradually disappeared without external treatment, and in a case of extensive trichophytosis of the neck the lesions were rapidly reduced. Thirteen patients with eczema were greatly improved by intravenous injections of sodium hyposulphite.

TECHNIC FOR ADMINISTERING DIGITALIS

Krehl remarks that nowadays he scarcely ever meets any case of heart disease of any kind that has not been stuffed with digitalis. It is administered hit or miss, while in his own practice he tries to modify the circulation without giving digitalis unless it is strictly indicated. He has had cases in which the edema subsided without drugs under bed rest alone, even with valvular disease of all kinds, syphilitic myopathies, or cardiac insufficiency from chronic nephritis; it is immaterial whether the pulse is permanently irregular, fast or slow, or whether there are extrasystoles. He never knew strict bed rest fail to benefit when the diet was restricted to 1 or 1.5 liters milk in the twenty-four hours. The amount of milk that can be allowed, the necessity to drop salt, and the length of time these restrictions have to be kept up, gage the severity of the case. And the same individual gage is found in each recurring attack. It is possible, he says, that the Karell cure might prove equally beneficial with rice and fruit, scanty salt and measured water intake being the main principle involved. It has been his experience that the outlook was more favorable the greater the rise in the specific gravity of the urine as diuresis increased. Water may pass off likewise in sweat or be eliminated by the lungs.

He urges further study of the factors which modify the insensible perspiration in these cases. If the relief from casting off the excess of water does not restore clinically normal conditions in the circulation, then we have digitalis to fall back on. This seems to increase the amount of blood pumped by the heart per second, besides its influence in improving the strength of the beat. He gives digitalis at once or not according as the patient has been getting digitalis and is suffering much and the circulation is much hampered.

EFFECTS OF COMPULSORY HEALTH INSURANCE ON THE PRACTICE OF MEDICINE

M. L. Harris, M. D., Chicago (*Abst. Jour. A. M. A., Apr.* 10, 1920). Any person practicing as a vocation a profession, such as medicine, which requires one to spend so much time and work trying to keep abreast with the progress constantly being made, must possess individualism and freedom of thought and action if he would satisfy his own conscience and bring to his patients the kind of service to which they are entitled.

Contract practice, which has been a part of every compulsory health insurance act up to date, operates in opposition to the physician's success, both from his own point of view and from that of the patient. It is claimed, however, by some of those who favor compulsory insurance that we in America will profit by the mistakes made by those countries that have already adopted such laws. That some of the bad features contained in the acts already in operation in some of the foreign countries might be eliminated seems probable; but it is highly improbable that any system of compulsory health insurance can be devised in which the conditions of medical service and the compensation therefor are under state supervision and control which would not be detrimental to individual and collective medical progress. That the income of a few might be augmented by an insurance act is quite likely; but, as often stated, it is not the advantage of a few but the good of the whole that must be considered. One frequently hears the remark that compulsory health insurance is bound to come sooner or later, just because it has been introduced in other countries. One might as well say that bolshevism or anarchy or Mohammedanism are bound to come, just because they came to other countries. Nothing of this kind is bound to come to a free country that is not the will of the people. The psychologic effect of the frequent repetition of such foolish statements has often led people to do that which they would not have done had they been governed by reason. This is one of the occasions when action should be guided by sound reason and not stampeded by psychology.

An attempt has been made to present the subject of compulsory health insurance in an impartial manner. If it has been shown that the scheme is not a desirable one, from the point of view either of the public or of the physician, there still remains an important problem. This problem concerns the best method of providing the highest type of medical service to all persons at prices within the reach of all. It is a problem which should be solved by the medical profession itself.

FACTORS CONCERNED IN ASTHMA AND THEIR TREATMENT

In the treatment of asthma, Jones maintains one has to consider an irritable center, hysterical influence of that center, infections of the bronchi and parts

of the lungs below them, more especially with specific bacteria whose toxins induce the paroxysms, abnormalities of the respiratory tract superior to the bronchi, and irritation of viscera outside the respiratory tract altogether. For the center the use of sedatives, and the usual psychical methods applicable to hysteria must be employed as required. For the nose and throat, surgical methods are generally needed, and appropriate treatment must be given to other visceral disturbances. As to the respiratory tract proper, bronchitis must be treated in some way or other. It is a bacterial infection, and in all recovery from such infections the natural capacity of the body to elaborate antibodies is required for which the only therapeutic measure is treatment by appropriate vaccines; finally, if the hypothesis as to the specific character of certain bacterial toxins in the causation of asthma is correct, that cause also can frequently be combated by the employment of vaccines. It is submitted that this constitutes a scheme for the treatment of the asthmatic state on rational lines.—Ex.

PROPHYLACTIC INOCULATION AGAINST YELLOW FEVER

From the results of vaccination in guinea-pigs, Hideyo Noguchi, New York, and Wenceslao Pareja, Guayaquil, Ecuador (*Journal A. M. A.*, Jan. 8, 1921), conclude that when sufficient quantities of the killed culture of *Leptospira icteroides* are given to guinea-pigs, these animals are usually rendered resistant to a subsequent leptospira infection. The degree of protection, however, is not strictly proportional to the amounts of the vaccine inoculated. As regards the vaccination of human beings, thus far the results are distinctly encouraging; but many more observations will be needed before a final decision of its value can be arrived at.

PREVENTION OF DIABETES MELLITUS

An analytical study of a considerable number of cases, as detailed in various life and mortality tables, leads Elliott P. Joslin, Boston (*Journal A. M. A.*, Jan. 8, 1921) to formulate this diabetic law: *It is rare for diabetes to develop in an individual above the age of 20 years who is habitually underweight, and when it does so develop the case will usually be found to be either extremely severe, extremely mild, or associated with a marked hereditary taint or degenerative stigmas.* The tendency to diabetes appears to be congenital. It is more intense in childhood; but, escaping that period, the individual is less and less likely to acquire the disease if he remains underweight, whereas in the obese the tendency finds a fertile soil. In the fat the predisposition may be no greater, but the external cause is more provocative. Diabetes occurs seventy-nine times more often in those more than 20 per cent overweight than in those more than 20 per cent underweight. Nervous excitement or nervous strain has also been considered a factor in the etiology of diabetes. It is notable, however, that soldiers returning from the front did not show sugar in the urine. The preponderant influence of obesity on the development of diabetes explains various peculiarities in diabetic case histories. In the presence of a wasting disease, diabetes is almost unknown. If the principle of low nutrition is effective in treatment, how much more will it be effective in prevention! And this the statistics of the 1,000 cases analyzed by Joslin prove. For the prevention of more than half of the cases of diabetes in this country, no radical undernutrition is necessary; the indi-

vidual is simply asked to maintain the weight of his average fellowman.

URINE IN SYPHILIS

The urine was examined by Joseph Vietor Klauder and John A. Kolmer, Philadelphia (*Journal A. M. A.*, Jan. 8, 1921) in forty-three cases of untreated primary syphilis, the duration of which was from a few days up to the time of cutaneous manifestions. Urinary abnormalities were present in three cases. The urine was examined in forty-six cases of untreated secondary syphilis. Urinary abnormalities were present in four cases. The positive cases all showed albumin and granular casts, excepting two in which casts were absent. In two cases, red blood cells were present. The albumin consisted of a trace, except that in two of the secondary cases a light cloud was present with many granular casts, and in one red blood cells. The urinary abnormalities disappeared after treatment with arsphenamin and mercury. The clear blood serum and the urine, from the same patient, were mixed for the presence of twenty acute untreated secondary cases were tested in this manner. The results were negative in all. Either the antibody is absent in the serum, or the antigen from the urine or both may be absent, as indicated by the results. The Wassermann reaction was performed with the urine of sixty patients with syphilis in the different stages of the diseases, many presenting acute symptoms and being untreated. Every patient yielded a positive blood Wassermann reaction, the majority of reactions being strongly positive with three different antigens. Of the sixty cases, the urines in but two yielded positive reactions. There is no characteristic feature in the urine of paroxysmal hemoglobinuria of syphilitic origin which serves to differentiate it from the same condition due to other causes. Results with urinary tests for syphilis were of no value as a means to the diagnosis of syphilis.

INFLUENZA IN INFANTS

C. Ashard (*British Journal of Children's Diseases,* April-June, 1919), reports thirty-two cases of influenza in infants, under two years. In the series are uncomplicated cases and cases complicated by bronchitis, pulmonary congestion, and bronchopneumonia. Eight deaths occurred, chiefly in bronchopneumonia. The prodromal symptoms were restlessness, feverishness, vomiting or diarrhea, and refusal of the breast; temperature up to 102.2° F. in uncomplicated cases and up to 104° F. at times. On the third or fourth day the cough began almost invariably. Onset of bronchopneumonia was with the usual symptoms, but the fever did not bear any apparent relationship to the gravity of the disease. In four cases tuberculosis was the sequel. In most of the cases the mother was attacked with influenza before the child, but in four cases the child was the only one to fall ill in the family. It is concluded that the infant does not possess any true immunity to influenza but is less exposed to contagion from without, usually becoming infected from the mother.

Surgery

SURGICAL BARRAGE

Drs. Charles W. Moots and Elmer I. McKesson, Toledo, Ohio (*Jour. A. M. A.*, Oct. 18, 1919). A surgical barrage may be defined as the process of surrounding the surgical patient with all the skill and refinement known to specialists in the various departments of medicine and surgery during the preoperative, oper-

ative and postoperative periods. Surrounded with such a barrage, the patient may reasonably anticipate the lowest possible mortality rate, with the shortest and least uncomfortable morbidity period. The question of the advisability of nurses administering anesthetics has recently been brought up. While many nurses may be taught to administer the safer agents in uncomplicated cases in a manner highly satisfactory to the operator, yet the principle is fundamentally wrong. The administration of a general anesthetic is the giving of the most powerful and dangerous drug at the most perilous time of the patient's life. During any major operation the anesthetist may be called on to make one or several new diagnoses and prognoses, and this certainly constitutes the practice of medicine and demands unusual skill. The war has corroborated our previous observations that when nitrous oxid-oxygen was available in skilled hands, this form of narcosis is one of the best shock prophylactics. It is not remarkable that nitrous oxid-oxygen should be safer in shock and in preventing shock than other anesthetics when one recalls the fact that muscles cannot be paralyzed with it.

GASTRIC CANCER

R. D. Carman, Rochester, Minn. (*Journal A. M. A.*, Nov. 15, 1919), says that without the use of the roentgen ray a positive diagnosis of cancer of the stomach is not often made early enough in the disease to indicate favorable possibilities of operation. The chances for cure in any particular case, according to the roentgen-ray evidence of operability, place it in one of three groups: Group 1, tumors, of the pyloric part, the operable portion of the stomach; Group 2, the borderline zone, or medium part, and Group 3, tumors of the cardiac region or the definitely inoperable zone. The roentgen ray, of course, does not determine malignancy, but if the patient who has indefinite grastic symptoms has any filling defect on the contour of the stomach, the chances are that it is malignant. We cannot differentiate in 100 per cent. of the cases between cancer and ulcer. Perforation and metastasis almost invariably remain undiscovered until after incision. Useless operations can in some cases be avoided by the clinician by discovery of metastases elsewhere, but the most frequent form of metastasis (abdominal) is undetectable by any method. Ascities, when associated with a history of malignancy, is a fairly reliable index of inoperability. Tumors of the fundus, not causing pyloric or cardiac obstruction, may exist for a time without causing inconvenience, and are usually inoperable by the time clinical diagnosis is definite. Group 3, or inoperable cases, are either located in the cardiac region alone, or have extended to it. If a tumor has not invaded the cardiac end, the patient should be given a chance of its sucessful removal by exploratory laparotomy as metastases are very liable to occur with the age of the growth. The roentgen ray can now discover 95 per cent. of all gastric tumors, of which only 50 per cent. are still operable. With routine roentgen examinations the percentage of recovery should be much higher because cardiac location occurs in only a small number of gastric cancers.

PATHOLOGIC RELATIONS BETWEEN THE GENITAL AND THE URINARY APPARATUS IN WOMEN.

In this long article Barragan discusses the reflex action, the mechanical action and the influence of infection in one of these apparatus on the other. He warns

in particular against the danger of injuring the bladder in laparotomies, especially when confronted with a tumor of vague outline. The bladder may be twisted and adherent to the tumor, and injection of fluid into the bladder, to throw it into stronger relief, may be the only means to differentiate this organ. He says that he frequently is consulted by patients on account of bladder disturbances after hysterectomy, some of mechanical and some of infectious origin. In two cases described in detail the disturbances were due to concretions developing on scraps of silk suture material. One woman of 50 required lithotrity twice. In another case a concretion developed on a silk scrap and was removed three years after the adherent bladder had been injured in removing an overian cyst. Normally there is a harmonious homogeneous symbiosis between mother and fetus — the toxins generated by the fetal metabolism being neutralized by the maternal defensive reactions. When this harmony is disturbed from any reason, pregnancy reactions follow from nausea to eclampsia, and the physician should be on the alert to detect this at the earliest possible moment so as to be able to reenfore the maternal defenses. Ambard's formula is a valuable guide for this. In a typical case mentioned, the coefficient was 0.128 but as the patient was put on a milk and vegetable diet for a month it dropped to 0.067, and all the symptoms of pregnancy toxemia subsided. In two apparently normal pregnant women at the third and fifth month the Ambard coefficient was 0.062 and 0.074.

RADIUM IN THE TREATMENT OF UTERINE FIBROIDS

J. W. Little (*J.-Lancet, 1919, xxxix, 219*). As yet the methods of employing radium have not been standarized, the amount to be used and the length of time it should be applied being based on individual experience. The important facts for a beginner to remember are that radium is a very powerful agent and that it is much better to use a little than too much.

Hemorrhage from fibroids of the uterus is quickly and effectively stopped by the introduction of 50 to 100 milligrams of radium in tubes placed in an ordinary rubber catheter and inserted into the uterus where it should be allowed to remain from two to twenty-four hours, depending upon the indications. A little gas anæsthesia may be needed for its introduction.

The patients in the series reported remained in the hospital one or two days, after which they went about their usual duties. With most patients one application was sufficient, but a few required two or three treatments. The tumors usually disappeared gradually. Large fibroids causing pressure symptoms and those suspected of malignant degeneration were removed. If the uterus was soft or there was a rapidly growing tumor, the number of milligram hours of radium treatment was reduced, the reason being that the newly formed cells if broken down too rapidly might produce a dangerous toxæmia.

The usual operative complications, such as pain, morbidity, thrombosis, and pulmonary embolism, are avoided by radium, and there are no contraindications to its use in debilitating conditions such as diabetes, nephritis, and anæmia. Its action depends upon the production of endarteritis and upon cauterization of the endometrium.

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SOME GENERALITIES ON INFANT FEEDING

By C. L. Holland, M. D.,
Fairmont, W. Va.

Read Before West Virginia State Medical Association, Parkersburg, May, 1920.

The subject of infant foods and infant feeding is so broad, and the views of men who deem themselves competent to speak upon the subject so at variance, that it is quite impossible even to review the subject in a paper of the length and caliber of the one here brought forth.

The subject is, however, of so much importance, and the attention given it by the rank and file of our fraternity so meager, that I presume to bring to your attention a few of the more salient points, hoping thereby to arouse a more general interest in the matter.

I shall endeavor, so far as possible, to adhere to facts and well grounded theories, and touch upon the subject only in a general way.

Those of you who are acquainted with the literature will observe that I quote rather freely from some of the well known authorities on the subject.

The problem of nutrition is without question the most important single problem bearing on the welfare of the young child. The early nutrition of the child may, and often does, affect the whole of after life.

The nutrition being directly dependent on the kind and quantity of food taken, as well as its adaptability to the given case, makes the subject of feeding one meriting our best, most earnest and conscientious consideration.

The problems arising in breast feeding, which is acceded by all to be the best and most satisfactory means of nourishing infants, will not be touched upon in this paper.

In prescribing artificial foods for infants, the habit of copying ready-made formulas from a book, it matters not how eminent the authority, or worse still the "choosing of proprietary foods at random, or using some proprietary food constantly," cannot be too severely condemned. It is, however, a lamentable

fact that this is done in many thousands of cases, instead of following the more rational method of endeavoring to fit the foods to the metabolic needs and digestive capacity of the individual baby whose condition and welfare are under consideration at a given time.

In considering the kinds and quantity of artificial food that shall be given an infant, there are certain fundamental facts that should be kept constantly in mind. First—There are only a limited number of food elements, namely, fats, carbohydrates, (comprising sugars and starches), proteids, salts, and water. Second—The babies' food must be made up of these elements, since there are no others. Third—If the ration is to be a well balanced one, these elements must be present in the proper proportion. The fats and carbohydrates both being utilized mainly as fuel may, under certain conditions, and to a limited extent, replace each other to advantage.

The proteids, being the tissue builders, must be constantly present in amounts sufficient to cover the protein needs. A child will, in time, die from malnutrition while taking a diet of fats and carbohydrates, furnishing a caloric intake far above his body's needs, unless he receives an adequate supply of protein at the same time.

Again it should be borne in mind that a food may furnish a sufficient number of calories, and contain an adequate supply of protein, and still not be a suitable diet for infants. Or if suited to the needs of one infant, not suitable for another. The aim should be to suit the food to the digestive powers of the individual baby.

The infant's digestive capacity can only be determined by careful and painstaking observation of the symptoms combined with a study of the stools in each individual case.

In the language of a very eminent pedriatist: "Success in the artificial feeding of infants can never be attained by following any hard and fast rules. Every baby is a problem by itself. The baby, not rules, must be followed to solve this problem."

The food must then be varied in its composition to fit the needs of the individual baby.

The number of proprietary infant foods on the market today is surprisingly large. Their great number speaks eloquently for the profitableness of the manufacture and exploitation of these mixtures.

One of the chief objections to the wholesale exploitation of these various foods, is the fact that perusal of the literature which invariably accompanies them, leads parents and others having infants in charge to believe that the feeding of babies is a very simple matter, and they are thereby led to attempt the feeding of infants themselves, rather than employ a physician to direct the matter. The outcome is, as you have all had opportunity to observe, often disastrous.

The best and most satisfactory artificial food for infants is cow's milk, modified to suit the child's individual needs. There are other animals whose milks correspond more closely to the composition of mother's milk, but they are not readily available. Their composition is such, however, that they also would need modification to make them suitable.

Goat's milk has in time past been lauded by some as the solution in many difficult cases. Its composition is such,

however, as to require its modification also. It is moreover difficult to obtain in most instances. There is, therefore, no valid reason for giving it preference.

The idea has been brought forth that the reason goat's milk has been found more satisfactory than cow's milk in some cases, was due to the fact that the goat was kept close at hand, and its milk given fresh, while the cow's milk was often old.

It is sometimes said of a certain baby that it cannot take cow's milk in any form. This is undoubtedly true but the instances are rare. "In most of these cases the trouble is not with the cow's milk, but with the way in which it has been given. * * * In these instances the symptoms are probably manifestations of anaphalaxis to the protein of cow's milk. It will almost always be found that these babies were given cow's milk in the first few days of life, when the intestines were in an abnormal condition. The foreign protein of the cow's milk was probably absorbed at that time and produced the sensitigation."

An argument frequently used in favor of some particular proprietary food is that a certain baby did not do well while on cow's milk, but immediately thrived when given the prepared food. This is, of course, quite often true, but it is not evidence, per se, that the proprietary food is the best food for infant feeding. It is evidence only that the food contains the individual food elements in amounts suited to the digestive capacity of that particular infant. There was nothing in the prepared food that could not have been quite readily put into a modified cow's milk.

The increased cost of the proprietary foods over that of foods prepared in the home is, in many instances, an item worthy of consideration. This added expense is quite unnecessary since it is quite impossible for them to contain anything that cannot be readily obtained by anyone who will take the trouble to procure them.

The proprietary foods on the market today can readily be classified under four general groups. "First—The condensed milk, sweetened or unsweetened. Second—The malted foods, in which the whole or a considerable part of the carbohydrates is in the form of maltose and the various dextrins. Third—The foods in which there is a considerable proportion of starch in addition to the soluble carbohydrates. Fourth — The foods which are almost entirely composed of starch."

The unsweetened condensed milks when diluted with water are not suitable food unless the relation of the food elements is still further modified.

Of the sweetened condensed milks Borden's Eagle Brand is the type. By simple dilution with water this milk cannot possibly be made into a well balanced ration for infants. If diluted until the fats and proteids are within normal limits, the carbohydrates are too high. If diluted until the carbohydrates approach the normal range the fats and proteids are too low.

It is surprising what fantastic mixtures are sometimes given to infants. In this connection I some months ago had brought to my attention an infant who was being fed on Eagle Brand Condensed Milk, which as it comes from the can is approximately 55% sugar, of which a little less than 43% is cane sugar. This condensed milk was being diluted with water and to the mixture milk sugar was being added in considerable amount. It is needless to say that the baby was sick.

One further observation concerning condensed milks. As they come from

the can they are supposed to be sterile, but unfortunately are not always so. Jordan and Mott on making investigation found in some specimens a bacterial content rising as high as ten million per cubic centimeter.

The best types of malted proprietary foods are Mellen's Food and Horlick's Malted Milk. When simply mixed with water their fat and proteids content is too low. When used to modify cow's milk they possess no advantage over the ordinary dextrin-maltose combinations.

The chief reason why foods of this character are found advantageous in the feeding of some babies is, that when mixed with cow's milk their carbohydrate content in the form of dextrin and maltose has a colloidal action on the casein and thereby render it more easy of digestion. Their action in this regard is no greater however than that of the plain dextrin and maltose.

Some weeks ago I had a young mother six days from Chicago, bring her first born, age ten weeks, to my office, because it cried continually and had a very greatly excoriated buttox. It was moreover having ten to twelve loose, green watery stools each day. It was found, on weighing, that this baby had lost six ounces since birth. On questioning regarding the food, it was found that the baby was being fed at two hour intervals on Horlick's Malted Milk, (which is nearly 80% sugar), mixed with boiled water. To this mixture cane sugar was being added, and this at the direction of a physician. For those of us who practice in small towns and rural communities such a blunder could hardly have been overlooked, but for a man located in a great medical center, where had he taken the trouble to do so might have looked in almost daily on children's clinics the equal of any in the land, such an insult to the digestive tract of an infant is inexcusable. The child's condition was promptly rendered satisfactory by changing the food to cow's milk modified with milk sugar.

Of the starchy and sugary foods, Nestle's Food, Eskay's Albuminized Food and Allenbury's Food No. 3, are the best examples.

In foods of this class the fat content is almost at the vanishing point, and when used for the modification of cow's milk, which is the purpose for which they are designed, we have but little else than a milk modified with a cereal water and some form of sugar, which can be done equally well from simple materials available in the home.

As examples of the starch foods Imperial Granum and Ridges Food may be taken. Their composition being almost identical. When used in the making of milk modifications they amount to the same as a milk modified with some simple cereal water.

It is interesting to compare the analysis of Imperial Granum as given by Holt in his Disease of Infancy and Childhood, 1911, page 162, with the analysis of wheat flour as given by Atwater and Bryant in Bulletin No. 28 N. S. Dept. of Agriculture.

It has been found that the baking of dry wheat flour causes the detrinization of a very small percentage of starch. If therefore one will take the trouble to bake wheat flour in a moderate oven for thirty minutes, he will have a fair sample of Imperial Granum, minus, of course, the high sounding name, the fancy box and the extravagant price. It would, however, be more economical and the results quite as satisfactory.

In making a milk modification it would seem, on a casual view of the subject, that a food which contained the

same food elements in the same proportion as in mother's milk would be a suitable food for infants. This is unfortunately not true. For although the substance may be the same chemically, it is not the same from the standpoint of biology. It is impossible to make a modified milk that is identical with human milk.

"The composition of human milk does, however, teach us certain things as to the digestive capacity of infants, and as to the general principles to be followed in the preparation of a food to meet this digestive capacity." It should always be borne in mind, that while the breast fed baby will thrive throughout the nursing period on a milk of uniform strength, that the artificially fed infant will require a food less concentrated in the early months and one of greater concentration than mother's milk in the latter months of nursing.

This rule does not, however, hold good in cases in which for any reason the digestive function has become deranged. In these cases the food elements must be varied in amount to fit the individual needs as well as the digestive powers.

The most satisfactory way of fitting a modified milk to an infant's needs is by making your calculations and modifications in percentages of the various food elements in relation to the total quantity of food. In this manner, with the percentages of each element before the mind they may be increased or diminished, as the clinical symptoms or stool examinations may indicate.

The point may be raised that this percentage feeding is too intricate for general application. This is distinctly not true. There is nothing about the matter which cannot be readily understood and applied by one having even a slight acquaintance with arithmetic. He must, of course, have knowledge of the composition of the various articles used in making the modification, as well as the elements of which cow's milk is composed. The time consumed in making these calculations is not great when the fundamentals have once been mastered. There is moreover nothing about the preparation of the food mixture that cannot be readily carried out by the average mother when the matter has been properly explained.

A point of prime importance in connection with making of a modified milk is the character of the milk used. It must be as fresh as possible, and too great care cannot be exercised to have it clean. It is impossible to make a wholesome baby food from dirty milk, no matter how it may be modified.

It is advisable in most instances, and especially so in the heated season, to sterilize the mixture, by either pasteurization or boiling before it is given to the infant. It may be contended by some that this procedure renders the digestion of cows milk more difficult. It is only necessary to say, however, that this is an open question, and the added safeguard against infectious micro-organisms which flourish in milk will warrant its application.

Again it has been found that infants fed upon milk which has been sterilized by heat are more susceptible to that nutritional fault known as scurvy than those fed upon raw milk, because of the destruction of those hypothetical substances designated by the term vitamins.

To offset this tendency it is only necessary to add to the dietary a small amount

of orange juice, which it at once the prophylatic and curative agent for this malady.

In conclusion, shall we not give more attention to the rational feeding of cows milk, rather than rely to so great a degree on the various makes of proprietary infant foods.

HEAT AND COLD IN THE TREATMENT OF SUPERFICIAL INFLAMMATION

By W. W. STRANGE, M. D.,
Huntington, W. Va.

Read Before the West Virginia State Medical Association, Parkersburg, May, 1920.

It is a common practice to use some form of cold application for the treatment of inflammation. Whether the injury is traumatic or infectious, old or recent, the resulting inflammation is very frequently treated by an ice bag or cold pack or by immersing the part in a cold bath. This practice may be accounted for in two ways. The first is a tendency toward empiricism in therapy. This is especially true where the treatment is simple and to some extent symptomatic. The second way to account for the custom is that numerous authorities favor it, but indications and precautions advocated by these authorities are not usually observed.

Da Costa, in his text book of surgery, refers to cold as a powerful and useful agent in the treatment of inflammation because of its reflex effects, but cautions against the use of cold late in an inflammation or when there is considerable exudation. Da Costa quotes Nancrede to the effect that "stasis soon arises at the focus of inflammation or when there is an area of stasis surrounded by a zone of hyperemia." Cold benefits the hyperemic zone but aggravates the stasis. Nancrede cautions us as follows: 'Judgment is therefore requisite to decide whether the evil at the focus will not outweigh the good exerted at the periphery.'

I would call attention to the specific limitations that these authors put on the application of this treatment.

Acute inflammation in its earlier stages is essentially a vascular phenonenon. There is first a dilation of the vessels and an active hyperemia of the part which is followed by stagnation of the blood and at times even by stasis. The period of active hyperemia is usually very short. The cause of the subsequent retardation of the blood flow does not seem to be definitely established. This stagnation takes place while the vessels are dilated and it seems probable that it is due to a paralysis of the vessel walls and some change in the endothelium which results in that coat offering increased resistance to the blood current.

Obviously, a sufficient blood supply to injured tissue is necessary to the proper processes of repair. If permanent stasis occurs, loss of tissue is inevitable. Cold favors stasis, while heat tends to maintain circulation through the injured part. The effects of these agents on the viscosity of the blood is probably largely responsible for this result. It can be easily demonstrated in healthy tissue that cold increases the viscosity of the blood and markedly retards its rate of flow. Only at the very beginning of an inflammation, when there is active hyperemia is there any indication for the use of cold and this stage is so short that it has

already passed and retardation has begun when the average case is first seen by the surgeon.

As Naucrede has pointed out, active hyperemia and retardation or stasis may co-exist in a wound. This condition should raise no question as to the proper thermal treatment. Cold will have a deleterious effect on the area in which retardation or stasis is present, but heat is not injurious to the area of active hyperemia. Schaffer's work, which will be discussed later, shows clearly that heat is actually beneficial even from the beginning of an acute inflammation, i. e., even in the stage of active hyperemia.

The application of heat to an inflammatory area is frequently avoided because of a belief that it promotes or induces suppuration or extensive oedematous swelling and cold is applied for the purpose of preventing these processes. Adami, in his review of Schaffer's work, says that cold merely retards the inflammatory process. In other words it may retard suppuration but cannot prevent it. On the other hand, heat tends to produce an active hyperemia with extensive serous exudation and markedly reduces the number of leucocytes that accumulate around the focus of inflammation. If suppuration actually has taken place before the application of heat, that method of treatment hastens the pointing of the abscess and makes the pus thinner so it is more easily evacuated. The instances are infrequent in which purely oedematous tumefaction progresses to the point where it causes dangerous tension. Schaffer has shown by his carefully controlled experiments that in inflammations of bacterial origin heat not only changes the nature of the exudate from purulent to serous but accelerates the death and disintegration of bacteria.

It is difficult to compare the efficiency of different methods of treatment by their use in clinical cases. The lesions demanding treatment present so many differences that it is not easy to get control cases, and without controls observation is likely to be biased. The use of heat in a variety of lesions including such cases of superficial inflammation as cellulitis, erysipelas, epididymitis, and the usual sprains and contusions seen in a surgical clinic has given more satisfactory results than the application of cold. In practically every case the pain has been relieved by heat as readily as it usually is by the use of ice. In epididymitis especially have the results been satisfactory. In these infections the acute symptoms were not followed by a long period in which there was an indurated swelling of the epididymus as was the case in similar conditions treated with an ice bag.

In conclusion it may be said that the indications for the use of cold applications in cases of superficial inflammation are very limited and that the use of these therapeutic agents often aggravates certain undesirable features of the inflammatory reaction. Heat, on the contrary, is beneficial at all stages of acute superficial inflammation.

ORGANOTHERAPY AS AN AID IN GYNECOLOGY WITH SPECIAL REFERENCE TO THE PITUITARY

By M. V. GODBEY, M. D.,
Charleston, W. Va.

Read Before the West Virginia State Medical Association, Parkersburg, May, 1920.

Organotherapy is comparatively a new branch of medicine. However, experiments date as far back as 1859, when Schiff discovered that fatal results would follow the total removal of the thyroid gland. This was also discovered very early by Kocher. It was then that operation on the thyroid first attracted the attention of the medical profession. G. R. Murray first published the results achieved by administering thyroid extract in October, 1891. Brown Sequard was probably the best known of the early experimenters with organotherapy. In 1890 Vassale in Italy, and Gley in France experimented with injections of thyroid to animals that had been deprived of their thyroid, and demonstrated that these animals could be kept alive by such injections. This was soon followed by application of organotherapy when Murray treated his first case of myxodema and demonstrated that this condition could be cured by these means. However, organotherapy made little progress since its discovery until recent years.

As this article deals principally with abnormal conditions produced by disturbances of the endocrine system in relation to diseases of women and its relation to the sex glands, I will mention briefly the effects produced by insufficiency of the thyroid. It has been demonstrated that at the age of puberty, if the sex glands are removed there is impaired development of the individual with no external sex characteristics. Persons in whom puberty has not occurred at the usual age, say fourteen to sixteen, the attributes of sex are absent. In these cases the male looks very much like the female. A similar phenomena may be seen in women after removal of the ovaries, and the menopause, when they even show a tendency to devlop a mustache and hair on the face corresponding to the male beard. This is also true in women whose ovaries have been altered by disease or habitual sexuality. In young girls with delayed menstruation up to sixteen or seventeen years of age there is generally a marked disturbance of metabolism presenting symptoms of chlorosis, anemia nervousness, discoloration of the skin and often pigmentation.

In such cases there is an exhaustion of the thyroid which develops as a consequence of a hyperacidity of the gland, with a tendency to degeneration and changes in the ovary which produces impaired or improper secretion. These conditions are overcome by thyroid feeding. When there is impairment of the thyroid and maybe hyposecretion of the ovaries and the pituitary body, especially the anterior pituitary gland, since it is claimed by some authorities that the direct inhibition of the ovary is the thymus gland, it may be that the thymus plays an important role in cases of delayed menstruation and development of the sex glands at the age of puberty.

Formerly these cases were treated with tonics of which some form of iron was the base of all medication, by nutritious food, proper rest, exercise and entertainment. While now they are treated

by the administration of thyroid, ovarian and pituitary extracts in addition to the above, and the effect is most satisfactory. They immediately gain in weight, menstruation will be established with a general disappearance of all nervous symptoms, and they will soon develop the proportion of a well developed normal individual.

It is the cases of minor disturbance of the thyroid and ovaries that is most often overlooked, and it is in these cases that thyroid medication is most beneficial when properly administered. There are two periods in the life of women when there is most always a minor hyposecretion of the thyroid and other endocrine disturbance, that is at the age of puberty and the climacteric. Other cases of disturbance of the thyroid generally occurs between the 25th and 30th year. I have already mentioned briefly some of the changes produced by disturbances of the thyroid in early life. There is always a slow pulse, a subnormal temperature, and low blood pressure. The surface of the body is cold, cold hands and cold feet. The skin is dry, dryness of the hair. The hair either turns gray or falls out. They have flat breasts and hips, their faces are often irregular in structure and jaws prominent. There are deposits of tartar on the teeth, the gums are shrunken, recede from the teeth, become loose and may fall out.

Some cases show collosal obesity, while some cases of thyroid and ovarian insufficiency may be remarkably emaciated. They are inclined to be moody and may be melancholy. These cases are generally classed as neuroses or so called neurasthenias. I believe it is practically agreed by most authorities that neurasthenia is most always due to disturbance of the internal secretions. That there is no doubt of the relation of the pituitary to the thyroid and ovary has recently been shown by experiments on dogs and other animals.

The anterior pituitary body promotes skeletal growth while the posterior assists metabolism by synergizing of the thyroid and other endocrines. A new growth of hair has been observed where it had fallen out previously, and very strange to say this new growth of hair may be dark when the hair that had fallen out previously was gray in color. However, its principal use is to augment the process of oxidation. Oxidation is often increased 60 per cent. The action of the pituitary body upon metabolism has been shown by authorities, who found a diminution of oxidation after degeneration of the pituitary body and an increase after medication with extracts of the same organ. This fact is also shown clinically by cases of obesity after degeneration of the pituitary body in acromegally.

SUMMARY

That there is a direct relation between the sex glands and the pituitary has been shown by experimentation, and that where there is a disturbance of the pituitary there will be a disturbance of the sex glands. That thyroid and ovarian feeding is beneficial in the treatment of diseases peculiar to women, and in some cases the results are phenomenal.

THE CO-EXISTENCE OF GALL-BLADDER AND APPENDICEAL INFECTION

By WILL A. QUIMBY, M. D.,
Wheeling, W. Va.

Read Before the West Virginia State Medical Association, Parkersburg, May, 1920.

The co-existence of gall-bladder and appendiceal infections has attracted my attention because, in my own practice, they are almost as common as fractures.

By means of the present day radiographic technique some of the text book signs and symptoms of disease must be set aside. New and more accurate information is gained relating to pathology.

It is my purpose in this paper to briefly discuss both clinical and radiographic signs referable to principally the gall-bladder, duodenum and appendix as I encountered them in three hundred and fifty cases during the past two and one-half years.

Contrary to the method pursued in some X-ray laboratories where the largest per cent of the work is done by technicians in a routine way, I personally conducted the entire examination myself, and furthermore, take advantage of any information obtainable from the patients in their own words concerning their symptoms.

The majority of patients upon presenting themselves for examination describe the symptoms with the old term "indigestion." The most constant symptoms related by the patient is gas in the stomach; the presence of gas frequently causes an embarrassed heart. The next most common complaint is aching between the shoulder blades. Pain is present across the back on a level with the upper pole of the kidneys. When the third and fourth parts of the duodenum is extensively involved, there is a distress in the right upper quadrant close to the edge of the ribs. A cholecystitis may produce pain or distress most anywhere in the chest, especially beneath the sternum and in the left lower chest. Less frequently the pain extends out as far as one or both elbows. A persistent cough may be among the chest symptoms. Nervous disturbances such as insomnia, chill and fever sensations are not uncommon. When pathology is extensive there may be pain on the left side where the main portion of the stomach lies. Some days the patient will enjoy good health; other times the least one could take into the stomach as milk or water, causes intense disturbance.

Where the appendiceal symptoms predominate in conjunction with or aside from the usual local tenderness, the stomach may be greatly disturbed, causing nausea, pyloric spasm, chest pain, cramp across the waist line, diarrhoea, constipation, etc. Various lesions of the right kidney and ureter are often confusing with the gall-bladder, duodenum and appendix. To our knowledge the pancreas is involved only occasionally, but is frequently not suspected by the clinician until far advanced in a pathological process.

Differential diagnosis is not within the scope of this paper, but it is our aim to observe every shadow recorded on the radiograph and account for the same. Furthermore, sufficient pathology should be located to account for the symptoms present.

What about the source of infection of the gall-bladder and appendix? Such

acute and febrile diseases as typhoid, influenza, etc., are very pointedly responsible for many cases examined. Patients state they had no trouble whatever until after the influenza. Focal infection is the most satisfactory explanation for the majority of these cases. With the appendix a blind pendulous tube, the lodgement of bacteria in it is easily conceived, but I have not found any authoritative statement as to the channel through which the bacteria enters the gall-bladder. The portal circulation and lymphatics have been named as being responsible. The direct ascension of the bacteria through the ampule of Vater, the same as bacteria ascends from the urinary bladder to the kidney is a rational supposition.

The writer is satisfied that the Radiographic study of these cases reveals more information than other laboratory methods, such as gastric analysis. These cases are examined radiographically and fluoroscopically in conjunction with the Barium meal. The radiograph is a record of what is seen fluoroscopically, although all fluoroscopic information cannot be recorded on the plate. A thickened gall-bladder, containing heavy bile, in other words a pathologic gall-bladder, can practically always be visualized on a radiograph.

The appendix is frequently not visualized because the inflammatory process decreases the lumen excluding the barium. A year's study of referred gastro-intestinal cases, attracted my attention because of a large group showing co-incident gall-bladder and appendiceal disease.

After studying these locations which are found to be undoubtedly infected, the question arises, just when is the appendix alone diseased and should be removed, and when should only the gall-bladder be treated surgically. My belief is that in the earlier stages of the chronic condition, one or the other will give predominating symptoms, usually the appendix, it will be removed. When this happens, as I have witnessed a number of times, the patient will return in one month to one year, complaining of no permanent relief from the operation. To my mind, when such an appendix was removed the gall-bladder was involved simultaneously and should have been treated surgically, and visa versa. This is sufficient reason for saying that if a patient is complaining enough to justify a Barium test of one part of the gastro-intestinal tract, surely the entire tract should be gone over. To illustrate, Sept., 1917, Mr. C., age 35, of his own accord, asked for an X-ray examination of his appendix. Only this part was consequently examined. The appendix was removed. Twenty-six months later he came in because of neuritis, and feeling indisposed, asked for teeth pictures. They were negative. Because of gastric disturbances the stomach and gall-bladder were examined. The Roentgenographic signs of a diseased gall-bladder were found. Mrs. S., age 55, had appendix removed sixteen years ago. The operation gave no relief. An X-ray barium examination revealed cholecystitis. This gall-bladder was undoubtedly infected also at the time of the appendectomy.

Some other outstanding features in this entire series of cases are the relatively small number, 7%, of gastric and duodenal ulcers found, including old and new ones. Only two cases exhibited gall-stones, one had jaundice. Eight cases showed distinct evidence of pancreatitis. All these cases of pancreatitis had some form of dry skin disease. This latter

statement conforms to some observations A. J. Quimby and I made in New York over three years ago.

To summarize, this paper is first, to emphasize the co-existence of gall-bladder and appendiceal infection, and the relative high frequency with which this occurs among diseases of the gastro-intestinal tract. Second, in chronic cases, the stomach and intestines both should have a thorough Roentgen-Barium study before any surgical correction is attempted.

THE USE OF NITROUS OXIDE-OXYGEN AS AN ANESTHETIC OF CHOICE

By MISS HAYS,
of the Coal Valley Hospital.

Read Before Fayette County Medical Society, June 8, 1920.

"Even as a surgeon minding oft to cut
Some careless limb, before in use he puts
His violent engines in the victim's member,
Bringeth his patient in a senseless slumber.
And griefless then, guided by use and art
To save the whole saws off the infested part."
—Dubartos, 1592 A. D.

Doctors and Members of the Fayette Medical Society:

I have been asked to give a paper on the use of Nitrous Oxide Oxygen as an anesthetic of choice, as we are now using it in our operative work in the Coal Valley Hospital. First, I would like to give a brief outline with regard to its chemical formulae.

Properties: Nitrous oxide is a colorless, transparent, feebly refractive gas with a peculiarly sweetish odor and taste. It is non-irritant to the mucous membranes. It was first prepared by Priestly in 1772, and first liquified by Farraday in 1823. Liquid Nitrous Oxide is a colorless, very mobile body, having a sp. gravity of .9369 at O^0 C. Its boiling point at 760 mm. pressure is 90 C; the freezing point 102 C. Approximately speaking, 15 ounces of liquid Nitrous Oxide will furnish 60 gallons of gas.

Nitrous Oxide produces anesthesia by its direct physiologic effects. When given with Oxygen or atmospheric air, it has very little effect on the heart, lungs or kidneys. It is dissolved directly into the blood. The combination of N_2 O and Oxygen was first proposed by Frederick Hewett. When N_2 O is given with Oxygen it may be continued a sufficient length of time for any ordinary surgical operation with very little effect on the blood pressure. In one case, I personally administered it three hours and ten minutes for an intestinal resection and anastomosis, following an acute obstruction and resulting paresis of over three feet of the bowel. In this case post-operative course was free from either nausea or vomiting. There was little or no gas distention, and patient's recovery was from every count an ideal one.

To overcome anxiety and pre-operative dread, also to aid in the induction of anesthesia, a pre-anesthetic hypodermic may be employed to great advantage. Our dosage is Morph. gr. 1-6 - 1-4 with atropine or scopolamin gr. 1-150. In children under 12 years and patients enfeebled with age, the pre-anesthetic hypodermic is omitted. This hypodermic is also of great value to the patient from the standpoint of protecting the organs of the kinetic system from damage due to the necessary trauma of the operation.

It has been clearly proven in laboratory work on animals, where morphine

has been employed and trauma used, the damage to the brain cells, liver and supra-renals has been much less marked than in cases where no opiate has been used. In addition to the pre-anesthetic hypodermic there cannot be too much stress laid upon psychic influences brought to bear on the patient. A reassuring attitude, both on the part of the surgeon and other attendants prior to, and on entering the operating room is of great value. Patients should be made to feel that they are taking the wisest step possible to regain health and that every care is to be taken of them throughout the anesthesia and operation. Personally, I prefer that all patients be kept quiet and in bed following the administration of preliminary hypodermic up to the time of operation, then brought gently to the operating room on a surgical carriage, as they are often both drowsy and slightly dizzy from the administration of the opiate, and the effort of having to be partially dressed and made to walk to the operating room has a more or less counter effect to the sedative action of the drug, as well as entailing unnecessary exertion on the part of the patient. After patient is helped onto the operating table it is our rule that the operating room be kept quiet, no talking, other than reassuring remarks on the part of the anesthetist; no rattling of instruments and no ostentatious preparation for the operation should be seen or heard by the patient; neither should he be forcibly held on restrained until consciousness is lost.

NITROUS OXIDE AS COMPARED WITH ETHER OR CHLOROFORM

There are a few disadvantages in the use of this agent to which I should like to call your attention. As we know, N_2 O-O is a much lighter anesthesia than ether or chloroform and gives less muscular relaxation. However, from the patient's standpoint, this is really an advantage since it necessitates a more gentle manipulation of the organs on the part of the surgeon thus guarding the patient against trauma and resulting shock. Again N_2 O-O requires a more special training than ether in order to secure a safe and even anesthesia and should never be attempted by one not specially trained in the giving of it, since it is either the safest, or the most dangerous of all anesthetics, depending on the efficiency or inefficiency of the anesthetist.

The cost of N_2 O-O, unfortunately, is far in excess of that of ether or chloroform and it also requires a much more expensive apparatus to administer. In handling specially resistive types of patients, among whom are included alcoholics, heavily built muscular men, and those of a neurotic type, Nitrous Oxide Oxygen alone, is often insufficient to induce the necessary relaxation and even anesthesia desired. In such cases, in addition to the above named combination, it is wise to add a sufficient percentage of ether to insure relaxation, rather than try to run on an unduly large percentage of N_2 O. These disadvantages, if they are to be termed as such, are, however, more than out-balanced by the many and marked advantages of N_2 O-O.

Extensive laboratory work as carried out in the Lake Side Hospital research work with animals, has clearly proven that protracted ether or chloroform anesthesia causes cytologic changes in the cells of the brain, the liver and the adrenals, with resulting acidosis of the blood, during and following anesthesia, which is identical with other forms of shock. In cases of acute or pyogenic in-

fection, ether or chloroform decidedly lessens the patient's resistance, or body defenses, through not only anesthetizing the patient but the phagocytes or disease-fighting cells of the blood as well, for from 12 to 24 hours. This weakening of the body defenses has undoubtedly cost the life of many patients. Dr. Crile in one of his works states that it is as logical to administer ether in cases of acute infection as it would be to anesthetize the defenders of a stronghold in the midst of an attack.

On the other hand, N_2 O-O conserves the body's energy, does not anesthetize the phagocytes, causes no injury to the brain, the liver or the adrenals, but in contra distinction often decidedly protects the brain against shock, as it possesses many of the properties of restorative sleep. It is, therefore, par excellent, and should be decidedly the anesthetic of choice in all cases of acute infection. Its efficiency is still further increased by using in connection with it, the anoci association, as so ably set forth by Dr. Crile in his book, "The Anoci Association."

In a study of 45 acute abdominal cases at Lake Side Hospital where N_2 O-O was employed in connection with the anoci association, as compared with an equal number of cases under ether anesthesia, there was noted a fall in the pulse beats both during and in the first twenty-four hours following operation, of from one to three beats, while with ether there was an increase of 15 beats during operation and 8.4 beats during the first 24 hours following.

ADMINISTRATION OF N_2 O OXYGEN

N_2 O-O is a much pleasanter anesthetic to take than ether or chloroform and patients once having been put to sleep under its influence, seldom dread a repetition of this anesthesia. Dr. Gwathmey cites his experience with one patient, whom he put to sleep under N_2 O-O 139 times without establishing any dread of, or repugnance to, the anesthetic. In short administrations N_2 O-O is often a very delightful form of analgesia following which, the patient quickly regains consciousness with only the pleasantest recollections of enjoyable dreams. In my anesthetic work in Cleveland I have experienced this feature with a number of my cases for short anesthesia. With N_2 O-O the time required for establishing surgical anesthesia ranges from 3 to 5 minutes as compared with 15 to 20 minutes with ether. Following the removal of the mask consciousness is fully regained in from 2 to 4 minutes, while in the recovery from ether it is often several hours before the patient regains full mastery of his faculties. Again, there is little or no post operative nausea or vomiting following the administration of N_2 O-O, therefore, in minor operations, or in cases where the pathologic condition of the patient does not contra-indicate nourishment both food and drink may be given shortly following the operation to advantage. N_2 O-O causes neither nephritis, bronchitis nor pneumonia, all of which deplorable complications have often been charged to ether anesthesia.

I would now like to take up the subject of anesthesia in goitre work. In

handling goitre cases, especially in the toxic or exopthalmic type, where extreme nervousness and anxiety are marked symptoms of the disease, N_2 O-O is of the greatest value. By employing Oxygen in the form of medical inhalations for a few mornings prior to operating, the patient will soon lose all dread of that form of treatment. Then on the morning prior to operating a 10 minute trial anesthesia may be given to note its effect on the pulse and respirations. The patient will easily believe he has fallen asleep during the treatment. If this trial anesthesia has proven satisfactory, the following morning the patient is again put to sleep in his bed then lifted gently from the bed to the surgical carriage; taken to the operating room; transferred to the operating table where the operation can be performed with the aid of the anoci association and sharp dissection with little or no trauma, or resulting elevation of pulse and respiration, all of which produce shock. Often these cases can be carried through on the lightest analgesia. After completion of operation it was our rule at Lake Side Hospital to return the patient to his bed before discontinuing the anesthetic. Later, on awaking he was reassuringly told that he had undergone the operation, therefore there need be no further dread of the necessity of having to face that ordeal.

In the toxic group of goitres where there is a definite increase in the base of the metabolic rate, death, Dr. Crile claims, during or following ether or chloroform anesthesia, is due to a failure of the internal respirations in the cells of the essential organs of the kinetic system. This danger is eliminated by the use of N_2 O-O; as N_2 O-O does not effect the cell respirations of the organs of the kinetic system.

APPENDICITIS COMPLICATING PREGNANCY

Review of Twelve Cases — Report of Ruptured Recurrent Appendicitis with Spreading Peritonitis Four Days Before Full Term — Operation and Recovery.

By DR. ROBERT KING BUFORD,
Hansford, W. Va.

Read Before Kanawha County Medical Society, Feb. 1, 1921.

During gestation, every type of appendicitis may occur—recurrent, adhesive, gangrenous, ulcerative, catarrhal, perforative and suppurative. All these types were found in the twelve cases operated in our clinic the past year. All of this series except two cases were operated before the fifth month of gestation. One of these was a case of gangrenous appendicitis during the seventh month of gestation, and the other, a case of suppurative appendicitis lacking four days of being full term is reported in detail in this paper.

According to Donahue, eighty per cent of the cases occur in the first six months. Munde, in 1894, was the first to operate on a pregnant woman with appendicitis. Abraham, in 1897, collected eleven cases from American Literature and added four more which he observed. He reported a mortality of fifty-three per cent in the mother and practically one hundred percent in the child. Since that time many cases have been reported. Boije of Helsingfors collected thirty-one cases. Fourteen died. Abortion took place in eighteen cases. Heaton reported

seventy-eight percent abortions. Grattan reports an unusual case of gangrenous appendicitis coincident with labor. The initial attack occurring in, and operated upon, during the first stage of full-term labor in a primipara. Delivery. Recovery. Baby lived two and a half hours after delivery. He concluded the cause of death of the baby was toxemia derived from the mother as a result of the acute purulent appendicitis. This excellent case report was published in the November number, 1919, "Surgery, Gynecology and Obstetrics" with International Abstract of Surgery. He was unable to find a report of a single case of appendicitis operated upon during the active process of labor in the literature for the past ten years.

Appendicitis complicates pregnancy with greater frequency than is believed and is the most important complication of pregnancy. It occurs at all periods of child bearing age and gestation. It complicates both intra and extra uterine pregnancy, or both may co-exist. Pregnancy aggravates recurrent appendicitis. Adhesions to the tubes result from perforative and suppurative types. Oschner first called our attention to the fact that tubes became infected by direct extension with resulting loss of cilia, kinks and occlusion, predisposing to ectopic, pregnancy and producing sterility. Perforations with resulting peritonitis are more severe and alarming during pregnancy. Inflammation is more marked due to extreme vascularity. Suppuration takes place high in the abdomen, which is less resistant. Protective adhesions are less likely to form. Intestinal obstruction is more frequent. Phlebitis and thrombosis are more common. Drainage is retarded.

The most usual symptoms found are dull pain followed by nausea and vomiting, right-sided rigidity with tenderness about McBurney's point, fever and leukocytosis.

The diagnosis of appendicitis during pregnancy is at times very difficult. It is necessary to exclude the presence of ectopic gestation, twisted ovarian tumor, ureteral calculus, pyelitis, salpingitis, cholecystitis, (ovaritis), fecal impaction, myalgia due to stretching of abdominal muscles, typhoid fever, and hepatic and nephritic colic.

A physiological leukocytosis is present in pregnancy, consequently, it loses its value as an index of the presence or degree of infection in associated appendicitis. We have done daily leukocyte counts at varying times during the day on uncomplicated pregnant women, and find the maximum count to be 12,000 without any appreciable increase in polynuclear neutrophiles. We concluded that a marked increase in polynuclear neutrophiles, and a total count over 12,000 suggested infection during pregnancy.

Expectant treatment is to be condemned. The profession is prone to contribute the patient's symptoms to pregnancy without thorough investigation. A definite and accurate diagnosis of appendicitis, irrespective of the stage of pregnancy, calls for immediate operation. A pregnant woman whose metabolism is good is a good surgical risk. The prognosis is better for the mother if there be no interruption of pregnancy, spontaneous or otherwise. The bad attacks cause abortions, and abortions aggravate the illness. The majority of surgically treated cases, there is not interruption of pregnancy, and when it does occur, it is not due directly to the operation. The interruption of pregnancy is not indicated. It aggravates the prognosis. Fetal prognosis is good in early operated cases.

We had no mortalities in the mothers of our series of twelve cases, no abortions, miscarriages or premature labor. Ten cases operated during the first five months of gestation had smooth recoveries. One case of gangrenous appendicitis operated during the seventh month of pregnancy, developed postoperative ileus, which was finally relieved without further operative intervention.

Case report of ruptured recurrent appendicitis, with spreading peritonitis four days before full term. Operation. Recovery. Mrs. A. V. White, female, age thirty, married, admitted to the Sheltering Arms Hospital November 29, 1919, referred by Dr. G. A. Smith, Page, W. Va.

History: Has always been well. Has three children living and well; has had no miscarriages. Has had ordinary diseases of childhood. No palpitation or dysponea; no night sweats, chills or fever. Urinates without difficulty; no burning or frequency. Menstrual periods regular; twenty-eight day type; three days duration. Mild dysmenorrhea and leucorrhea at times. Last period was in February. States that she thinks she is about due to be confined. Present illness: Began about four days ago with a sudden severe pain in right lower abdomen. The pain was severe and excruciating from onset until today. Pain at present time has practically subsided. She did not vomit, but was very nauseated. Has had four similar attacks; each one growing more severe than the last one. In all these previous attacks she has vomited.

Physical examination: Eyes: pupils react to light and accommodation. Ears, nose and throat negative. Enlargement of posterior cervical and epitrochlear lymph nodes. Heart: sounds clear; no murmurs; not enlarged. Temperature 103 F. Pulse 120. Respiration 24. Blood pressure, systolic 115; diastolic 75. Lungs resonant throughout; no rales; breath and voice sounds normal. Abdomen shows a large tumor formation extending from pubic region to ensiform cartilage, which appears like a pregnancy almost at term. In what would be the right lower quadrant and McBurney's point, if the uterus was not present, there is tenderness on pressure, but no muscular spasm. Liver and kidneys not palpable. Spine freely movable. Extremities and reflexes normal. Blood: Leukocytes 15,200, with an increase of polynuclear neutrophiles; erythrocytes 3,440,000; hemoglobin 85%. Urine casts present, otherwise negative. Diagnosis of ruptured recurrent appendicitis was made and an immediate operation advised.

Operation and result: Ether anesthesia, drop method. Right oblique incision, 3½ inches long, beginning in the flank, one inch above iliac crest, extending downward to Poupart's ligament to a point one inch below, and internally to anterior superior spine of ileum. Lumbar and abdominal muscles were divided and retracted, giving an exposure of the peritoneum very similar to the exposure sought in removing a stone from middle third of right ureter. The peritoneum in this instance was opened instead of being retracted. Free pus was found in peritoneal cavity. Appendix showed massive necrosis in outer third, perforated at tip, no adhesions or attempt to wall off. Peritoneum was acutely inflamed, showing evidence of spreading peritonitis. Appendix was removed in the usual manner. All pus possible evacuated. One rubber tube drain placed in pelvis, and one cigarette drain inserted in iliac fossa in close proxemity to the

stump of the appendix. Peritoneum, divided muscles and fascia were closed with interrupted chromic catgut suture No. 1. Skin closed with silkworm gut and retention sutures. The second day after operation, the patient developed bronchial pneumonia. Four days following operation she went into labor, terminating in fifteen minutes. A fully developed, living, full term baby was delivered, weighing eight pounds. The retention sutures held well and the wound was found intact after labor. Five days later the baby became icterus; fingers and toes began to peel off, spreading to hands and feet. A diagnosis of congenital syphilis was made. The mother's blood Wassermann test was four plus. The baby ceased on the eighth day. The mother was put on anti-luetic treatment. Drainage tubes were removed the seventh day, and sutures the ninth day. Patient was discharged from the hospital in twenty-one days after operation. Wound had healed nicely, with no hernia formation.

SUMMARY

1. Appendicitis complicates pregnancy with greater frequency than is believed, and is the most important complication of pregnancy; occurring at all periods of child-bearing age and gestation.

2. Recurrent appendicitis was the most frequent type we found in our series.

3. Expectant treatment is to be condemned.

4. A definite diagnosis of appendicitis is at times very difficult, and can only be made by exclusion.

5. A definite diagnosis of appendicitis irrespective of the stage of pregnancy, calls for immediate operation.

6. A pregnant woman, whose metabolism is good, is a good surgical risk.

7. A marked increase in polynuclear neutrophiles, and a total count over 12,000 suggests infection during pregnancy.

PROPHYLAXIS AND TREATMENT OF ECLAMPSIA

By DR. CHAS. A. GROOMES,
Daris, W. Va.

Read Before B.-R.-T. Medical Society, Oct. 8, 1919, at Thomas, W. Va.

In spite of the great amount of work which has been done on the subject, the cause of eclampsia is not known, and our knowledge of the subject is far from complete. Various theories have been advanced, several of which have a great deal of clinical evidence in their favor, the most plausible theory is that of a toxemia. There are a few cases which go into eclampsia apparently without warning and a few also in which the convulsions come on post partum, but the majority of cases show signs of a pre-eclamptic toxemia for a variable time preceding the onset of true eclampsia.

When signs of toxemia appear, the most important of which are persistent headache, severe epigastric pain, visual disturbances, oedema of the lower extremities, diminished amount of urine and the presence of albumin in the urine, treatment should be instituted at once. The patient should be put to bed, or at least confined to her room and placed upon a restricted diet, meats and the stronger vegetables being strictly forbid-

den. Williams recommends allowing the patient nothing but milk, which not only furnishes sufficient nourishment but also is a most efficient diuretic. At least two quarts should be taken in twenty-four hours. He allows small quantities of lettuce salad and bread and butter occasionally to relieve the monotony of the milk diet. The patient also is encouraged to take large quantities of fluid in the shape of plain water and cream of tartar lemonade.

DeLee and many French writers suggest giving absolutely nothing but water for the first three days before starting the milk diet. As the symptoms clear up and the patient's condition improves, the diet is increased, first adding starches, then proteid vegetables with vegetable oils; later a full vegetarian diet with the milder fruits and one egg a day. As improvement continues fish and poultry are added but a full meat diet is never resumed. Spices, tea, coffee and alcoholics, of course, are strictly forbidden.

An attempt should be made to throw off the excessive toxins present by increasing the excretion of the bowels, kidneys, skin and lungs. It is better to keep the bowels open by alternating the vegetable cathartics with salines, as the continued use of the latter would tend to produce anaemia and increase the headache. The cutaneous functions may be stimulated by the daily use of a hot pack or sweat bath, providing the patient be watched carefully, because occasionally a patient will die as a result of it.

In most cases this treatment will be followed by a lessening of the symptoms, an increase in urinary secretion, a decrease in the amount of albumin, a rise in the amount of urea excreted, and the patient will return to a normal condition. But this is not always the case as occasionally a patient will appear to be doing well, then suddenly go into eclamptic convulsions.

If under the above treatment the albumin steadily increases, the urea decreases in amount and the general condition of the patient does not appear to improve, the prognosis is bad and probably the occurrence of eclampsia can be avoided only by the induction of premature labor. But occasionally in such a case, the induction of labor having been put off for some reason, the patient will unexpectedly recover without the occurrence of convulsions. Therefore, it is possible that by following this rule, premature labor may be induced unnecessarily at times, but likely many patients will be saved from the danger of eclampsia.

If through lack of appropriate treatment, or in spite of the same, convulsions occur, nearly all authorities are agreed that labor, if not already started by nature, should be induced; or, if started, should be hastened as much as possible with safety for the patient. The experience of such men as Braun, Duhrssen, DeLee and Peterson prove that rapid emptying of the uterus under deep anesthesia after the first convulsion gives the best results. This practice has still another advantage in the saving of a larger number of children than would be saved if the patients were permitted to have several convulsions.

There are some authorities who take the other extreme and give narcotics, stimulate the action of the kidneys, bowels and skin, and wait for labor to come on naturally; and still others who advocate a medical treatment as indicated and hasten the labor only if the patient's condition becomes progressively worse.

The method to be selected for effecting the delivery will depend on the period of

pregnancy, the state of the cervix, the skill of the operator and complications such as placenta praevia, contracted pelvis, etc.

During the convulsive attacks chloroform should be administered in an effort to cut them short. After this large doses of morphine should be given hypodermically, starting with a quarter of a grain and repeating it, if necessary, until three doses have been given. Some claim better results from the administration of 30 to 60 grains of chloral hydrate per rectum. Diuresis should be stimulated by the administration of large quantities of salt solution subcutaneously and per rectum. The bowels may be moved quickly by giving one drop of croton oil in a dram of olive oil placed on the back of the tongue, or by one or two ounces of a saturated solution of Epsom salts through a stomach tube. A thick cork, folded towel or covered clothes pin between the teeth will prevent the patient from biting her tongue during the attacks.

As stated before, when convulsions have occurred during pregnancy or labor, delivery should be effected as soon as is consistent with the safety of the mother. In most cases as soon as convulsions occur labor pains begin. Most French authorities prefer to allow the labor to progress normally till the cervix is completely dilated, while most American and German obstetricians advocate emptying the uterus earlier, providing it can be done without serious injury to the mother.

If the cervical canal is obliterated but the external os is not dilated, dilatation may quickly and harmlessly be done by Harris' method, providing the external os will admit two fingers. Then if the head be low down, it may be delivered by forceps, but if not engaged, or only slightly so, by version and extraction.

If labor has not set in and the cervical canal is intact, it may be difficult to decide what course to follow. Williams recommends vaginal Caesarean section if proper assistants can be obtained.

After the birth of the child in most cases the convulsions cease. The third stage should not be hastened as a moderate loss of blood may do considerable good. If the bowels have not moved by this time, a second dose of croton oil may be given. Sweating and diuresis should be encouraged.

If there are not marked signs of improvement after delivery 300 to 500 c. c. of blood should be withdrawn and replaced by an equal amount of saline solution, thus diluting the toxins in the blood. Good results are even seen in bleeding patients with a thin and weak pulse.

Among other procedures is renal decapsulation which has been performed with the idea of relieving the intra-renal pressure and increasing the secretion of urine.

Numerous drugs have been used but none have been found to be specific for cases of eclampsia.

ENCEPHALITIS EPIDEMICA (MISCALLED LETHARGICA), WITH SPECIAL REFERENCE TO DIAGNOSIS

By TOM A. WILLIAMS, M.B., C.M.,
Washington, D. C.

Abstract from the Medical Record, June 11, 1920.

Premature generalization on a basis of slender experience, and want of neurological knowledge, are rife concerning

this disease. The name given it is a glaring instance, for the cases without lethargy are very numerous. It would be as justifiable to give the name "neoplasma cerebellaris" to cases of tumor of the small brain because these are so frequently characterized by torpor. The name "lethargica" might as reasonably have been applied to dementia paralytica. Of enteric fever, this concept showed itself in the name "typhoid." Typhus fever has been named similarly. As a matter of fact disordered feeling and impaired thinking are perhaps as frequent as is lethargy in the course of acute encephalitis.

Of ocular symptoms similar criticisms may be made. Histological examinations show that the disease is not focal, but diffuse. There is a universal invasion of the central nervous system by an infection, the reaction to which is a perivascular diapedesis of mononuclears. This impairs the function of the nerve elements, possibly by ischemia. If this is of only short duration recovery of function occurs when the circulation is re-established, but after a period comparatively short, necrosis supervenes with the resulting permanent loss of function, as a regeneration in the central nervous system does not occur. In the more severe and rare cases, hemorrhagic exudation may take place. If this is large, or if in a nuclear area, it may cause a destruction of tissue showing itself by permanent impairment of function. As the ocular nuclei are very small, are concentrated in restricted foci, and as they perform delicate functions which cannot be supplemented by other organs, a very slight assault will show itself symptomatically. That is why the affection of these nuclei is so conspicuous clinically when it occurs.

On the other hand a degree and extent of ischemia sufficient to impair the function of a small nucleus scarcely affects noticeably a large area like the centrum ovale. It even may fail to affect symptomatically such an organ as the percentral cortex, of which a considerable lesion may produce few symptoms, a familiar experience in the course of apoplectic hemiplegia.

However, *motor cortex syndromes* do occur because of acute encephalitis. In older people these may be very difficult of diagnosis, as in the case of a woman recently seen where a sudden aphasia while telephoning was attributed with reserve to the vascular inadequacy of late middle life. Encephalitis was not even suspected until three weeks later, when general torpidity intervened and another physician had no difficulty in making the diagnosis, which, however, proved inaccurate, as at death a month after that a frontal neoplasm was found.

When it is the *physchological functions* which only are impaired, the diagnosis is still more difficult. Such a case was that of a man in the 40's who was discovered in his embassy at midday very much excited because of a sudden loss of memory which was almost complete when I saw him two hours later. The agitation he showed was natural under the circumstances, but the alarm it had created among his colleagues was quickly allayed when they observed how easily the patient was managed by me. The next day the amnesia had completely disappeared, the patient remembering perfectly the most difficult tests. Only a general restlessness remained, lasting for a week or two without any torpidity.

Insomnia is a frequent symptom in cases of this kind. It is often of an agitated character and may be attributed to the uneasiness caused by disturbance of

function of the thalamic region which produces an affective disquiet, not at all due to psychological situations, and therefore not more than temporarily amenable to psychotherapy.

Only by its acuteness does the disease symptomatically differ from the granulomata which affect the central nervous system, in particular the form of syphilis known as dementia paralytica. This is easy to understand, for pathologically both are due to mononuclear invasions of perivascular distribution. The individual access need not differ in the two diseases; only the course does so.

To some, lymphocytosis of the cerebrospinal fluid has appeared an easy road to diagnosis, but this is not present in all cases, although it is generally so. It must be remembered, however, that it also occurs in disseminated sclerosis, another inflammatory disease occurring acutely, although of chronic course with exacerbations. I can conceive of cases where the differential diagnosis would not be possible without prolonged observation.

The colloidal gold curve, formerly supposed to be characteristic of paresis, is found frequently in encephalitis, but in these cases the Wassermann reaction is always positive in the latter disease, and never so in the former.

Lymphocytosis in mumps has led to an error of diagnosis, and could readily lead to error in tuberculous meningitis also.

To poliomyelitis this disease is pathologically an almost complete homologue, the latter, however, being often more intense pathologically speaking, as shown by the extensiveness of the exudates, and their frequently hemorrhagic nature. This accounts for the permanence of the results in so many cases. Tilney's case of poliomyelitis with prolonged somnolence has an encephalitic aspect.

Diagnostically between the torpid cases of poliomyelitis and the cases of encephalitis with paralysis, a decision can be made only tentatively in the initial period. This is particularly so in encephalitis with muscular atrophy.

Differentia are only tentative, too, in cases of encephalitis where the conspicuous symptoms are spinal segemental. Ascending or descending radiculitis lasting several weeks has characterized these. They resemble the meningitic form of poliomyelitis, and, except by their acuteness, they are not distinguishable from the lightning pains of tabes, except when the patient has well marked other signs of syphilitic radiculitis, such as loss of reflexes and anesthesia, more particularly of the attitude sense, and unless the serological reactions are positive.

This pseudoradicular syndrome probably arises endogenously, the posterior root zone within the spinal cord being progressively irritated by inflammatory invasion. One can hardly postulate a progressive meningitis as an explanation. I have, however, noted the Brudzinski sign in one case and the Kernig sign in two, and these are indicative of meningeal irritation. No post mortem of the radicular form has been reported, all five cases of Pardee, who has described it, having recovered.

Xanthochromia of the spinal fluid has occurred in two cases I have seen. In one of these there was also edema of the optic papilla. The yellow color of the spinal fluid in these cases must be due to absorption from an encephalitic hemorrhage. The diagnosis from a compression syndrome is of course made by the absence of level symptoms referable to the spinal cord.

Papilloedema may not be so rare when more consistently looked for.

From hysteria the diagnosis may be quite difficult when no physical signs have occurred, and flightly behavior is the only symptom; for patients whose cerebrum is impaired show an exaltation of suggestibility. This is a familiar truth to those who deal with states of mental confusion from intoxication. Encephalitis, however, resembles these latter in that there is an impaired fixation of attention and the ductility, as regards any particular stimulus is evanescent; while in the hysterial the suggestion tends to be tenacious. Further, hysteria should never be diagnosed by exclusion, but only after the discovery of the initial suggestion which has determined the hysterical behavior.

The erroneous doctrine that physical disturbances can be of hysterical original must not be allowed to influence the clinical diagnosis in the study of these cases as has occurred in a local instance recently. The weak suggestibility due to encephalitis was the foundation of an erroneous diagnosis of hysteria in a case recently seen in North Carolina, even although lethargy was present and partial ptosis had occurred.

The most difficult diagnosis of all is from the mild acute psychopathies, with or without delirium. In these cases the diagnosis can be made only by watching the course of the disease, or by finding lymphocytosis of the spinal fluid.

Announcements and Communications

Dartmoor, W. Va., Feb. 14, 1921.

Dr. J. R. Bloss,
Huntington, W. Va.

Dear Doctor:

I am sending you the protest of the Barbour-Randolph-Tucker County Medical Society against the granting of Chiropractor's License in this state.

We hope you publish them in the March issue of the Medical Journal, without fail, and if you can, send a marked copy to the chairman of the committee of Legislature and Senate having charge of the bill.

I am also sending with same cited cases of our personal knowledge of the damage done by depending on an ignorant, illiterate chiropractor, and I am persuaded that Elkins and vicinity is no exception to the general character of the so-called practitioners of this ilk.

Yours truly,

J. C. IRONS.

THE PROTEST OF BARBOUR-RANDOLPH-TUCKER COUNTY MEDICAL SOCIETY AGAINST LICENSING CHIROPRACTORS

We, the committee to draft the Society's protest against the bill now before the Legislature of the State of West Virginia, proposing the granting of License to Chiropractors, to pursue their work in the state, give the following as our reasons why such license should not be granted:

(1) The chiropractors are wholly unfit to treat diseases, because they are not trained to diagnose and differentiate between diseases of like symptoms, but quite different in nature and dangers; and further because they offer no sane method of meeting the danger of disease.

(2) The training of the chiropractor is such that by reason of his disbelief in, and the non-use of suitable remedies, he may and often does delay efficient treatment until the patient is beyond relief, and therefore he should not be licensed, as to do so jeopardizes the lives of many of our citizens.

(3) The chiropractor is taught that there are no germal diseases, and he believes and teaches such doctrines to the people, notwithstanding the well established fact that most of our diseases and many most destructive ailments are demonstrated to be due to germs, and to properly treat the patient he should be kept from contact with the germs, or anti-germal treatment applied when the disease develops.

(4) The regular physician is now required to possess a college education before commencing the study of medicine, then he must take four years of arduous study and training before he is granted a diploma from his college; and then undergo a rigid examination by the State Board of Health, before he is allowed to practice in the state. To require so much from a regular physician, and so little from the chiropractor, is in our judgment unfair, unjust, and unreasonable. We believe that all laws should be fair and equal to all the people, without an invidious discrimination, in its demands, on any.

Therefore we urge that the Legislature do NOT pass any such licensing bills, believing that doing so would not serve any beneficial purpose, but would in the end be a menace to the health and life of our citizens.

We call upon all the physicians of the state to vigorously oppose the enactment of any such iniquous measure.

J. C. IRONS,
GEORGE L. PIERCE,
A. P. BUTT,
Committee.

CASES CITED

No. 1. A case was being treated in Elkins by a chiropractor, and on presenting herself to a physician, it was evident she had scabies, and the treatment of adjustment did not destroy the itch mites.

The patient was going to public school, and as might have been expected, several cases developed in the school. Who was to blame?

No. 2. A physician of Elkins was on his way visiting his patients, and being called to see a sick child, which when he saw realized it to be in a dying condition. He found on inquiry the child had been sick for several days, with diarrhea, and had been daily adjusted by a chiropractor, until that day, when he failed to come. The child died very soon after. Its life might have been spared had any sane treatment been resorted to.

No. 3. Just recently a vigorous man, in his prime, was suffering with a severe pain in his head. He applied to a chiropractor, in Elkins, and received several adjustments. On his last visit there, he told a friend the treatment nearly killed him. He then called on a physician, in terrible suffering, and received an injection of morphine to ease the pain. He was taken to his home. The next morn-

ing he was in coma, and was taken to the hospital. The spinal fluid was examined, and he was found to have Cerebro-Spinal Meningitis, and died in a few days. These adjustments, so called, certainly had no curative effects, and might have, as they probably did, precipitate, if they did not cause his death.

No. 4. A lady, out in the country from Elkins, was having some abdominal pains and great discomfort of an indefinable nature to her. She called a chiropractor, who assured her he had suffered from the same disease, and was readily cured by adjustment. He proceeded to adjust her and caused great pain. Soon after she was in such collapse and agony that she called a physician from Elkins. He at once called the ambulance and took her to the hospital. She was operated upon, at once, and her abdomen was literally filled with blood. It was demonstrated that she had had ectopic pregnancy, and the adjustment had ruptured the sack, and came very near causing the woman's death. But for the early operation, death would inevitably have resulted.

No. 5. An aged gentleman, living near Junior, W. Va., was quite ill for some time, having persistent cough, great pain at times, fever and general debility. He was thought to have tuberculosis. He was examined by a physician and found to have empyema of right plural cavity, with an opening up through the bronchial tubes, which caused the cough. A chiropractor assured him he could cure him and proceeded to torture the old gentleman from day to day with adjustments. In the meantime, some passing friends (?) not having been disinfected, left the family the contagion of Variola; the old gentleman being the first to show the eruption. The chiropractor thought his treatment or the medicine he was taking was the cause of the eruption, not knowing anything about the vesicles of smallpox. A physician was called and the case readily diagnosed. Of course the adjustments ceased, and the chiropractor and his family had smallpox to their satisfaction. The worst of it was the exposure of the community. Later the patient was taken to the hospital at Buckhannon, was operated upon, and is now in fairly good health.

No. 6. A physician was called to see a middle-aged lady in the last stages of tuberculosis of the lungs. She was then emaciated and had a very distressing cough. At this time her stomach was very much disturbed and she could neither eat nor rest. Both lungs were nearly eaten out by the tubercular decay, and death was near approaching. At this time, it was learned that a chiropractor had been treating her, and assuring her she was improving and he was eventually going to cure her, and thus had deceived her for nearly two years. Had the woman had proper treatment she might be living to this day. Shall such pretenders be licensed to deceive the people, by our Legislature? Surely not.

No. 7. A lady with a large protuberant goiter, who we are told makes her living by knitting, crocheting and over the wash tub, has been visiting Elkins for months, making two or three visits per week to be ADJUSTED by a chiropractor to reduce the growth. The reduction can only be imaginary if at all, and for moral guilt, the one who deprives the poor woman of her hard earned money is as censurable as the highwayman. The only difference, is one gets by consent, the other by force. Why license the one, and jail the other?

The West Virginia Medical Journal

JAS. R. BLOSS, M. D., Editor
C. R. ENSLOW, M. D.
J. E. RADER, M. D. Assistant Editors

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Dear Doctor:

We want this to be the banner year for the West Virginia State Medical Society and each County Society, whose success will depend in a large measure on the County Secretaries and the State Secretary.

I am anxious to do service for the honor that goes with my position and for the love I have for the Medical Fraternity and our Association, and I am sure that you are.

Our objectives for this year are an increase of two hundred in state membership and the best annual program with the most "pep" that we have ever had, and we will reach them *with your help.* I am going to ask you to start a campaign at once to get every physician in your bailiwick into the Society, to secure us a few A-One papers for our state meeting, to report your Society proceedings and local news to the West Virginia Medical Journal, and to get a large delegation to attend our state meeting from your Society.

Keep everlastingly after the members till you get them to pay in their dues. Our state meeting will be held the fourth

week in May at Charleston. The subject of the papers will have to be in my hands by April 1st.

With kindest regards and fraternal greetings, I am,

Sincerely yours,

ROBT. A. ASHWORTH,

Secretary.

MEDICAL LEGISLATION

We wonder just how much attention is being taken by our members of the questions which will come up for final disposition this month by the Legislature.

What do you know of the various bills which have come up? Do you know the members of the House and State Senate from your district? Do you even know their names?

It had been the hope of your editor to have some communications from the medical men in both houses to give to you, subsequent to the February meeting in Charleston. For some reason these have not as yet been received and they cannot now reach the members of the State Association before the session is over.

Two of the County Societies have taken action on the bill for licensing chiropractors and your attention is called to Dr. Irons' communication from the B.-R.-T. Society and also the report from the Mercer Society.

Remember this. It is a far easier matter to prevent injurious legislation passing and so becoming a part of our commonwealth's law than it will ever be to get it repealed after it has once passed.

If we do not guard ourselves in these matters we shall find that we are facing Health Insurance, List Practice, et cetera as are our professional brothers of England. A few "mushroom" reformers and uplifters can raise merry h—— if left unguarded.

Our state medical law is an excellent one. Our State Health Council has done and is doing a great work. It is necessary though that some changes be made in the law and some additions given if we are to continue to grow more efficient and all that we hope for in health matters shall be accomplished.

Let the members of the State Association write for copies of the proposed new laws and the changes in those now existing at once that you may familiarize yourselves with them and then lend your aid by taking the matter up with your representatives.

TYPHUS FEVER

Just now we are passing through one of those periods of hysteria which seem to be an essential part of life for the American laity. Possibly it would be better to say the lay press for the citizens themselves do not give evidence of wild fears.

The fact that a few cases of Typhus have been detected among the passengers of a few vessels arriving at New York has been given great publicity, as well as the appearance of a few cases inland. No mention is made of the reporting from time to time of the discovery of this disease among the tenements of some of the Atlantic ports. Brill reported in 1910 something less than two hundred cases seen by him in the previous ten years. Since then these mild sporadic cases of "Brill's Disease" (shown by Goldberger and Anderson to be Typhus) have been reported at intervals. Yet we have had no epidemic of this malady. Those who have received the reports of the U. S. P. H. S. know

that it has been very prevalent in Mexico recently and still did not gain entry into the United States.

Many immigrants come to our state. Possibly some from the infected areas of Europe. It is well for the members of our profession to be on guard, especially those whose practice brings them in contact with the foreign element.

Still we cannot but feel that there is no cause for alarm that this vermin borne (louse) disease will become of epidemic proportions in America.

TAKE NOTICE

We are urgently in need of ten or twelve copies of the January, 1921, issue of our Journal.

Will some of the members who do not preserve their Journals for binding mail them to me at once.

State News

Dr. R. L. Hunter, of Jarrolds Valley, is spending several months in Los Angeles, Calif., doing post-graduate work in diseases of women and children. He will return home April 1st.

Dr. F. C. Hodges, of Huntington, and Dr. Wm. A. Thornhill, of Charleston, attended the January meeting of the Raleigh County Medical Society in Beckley.

Dr. George W. Johnson, of McAlpin, recently returned from Baltimore.

Dr. Ira M. Fisher, of Stotesbury, is in New Orleans doing post-graduate work at Tulane. During his absence Dr. G. R. Davis is looking after Dr. Fisher's practice.

Dr. W. W. Hume and family, of Beckley, are spending several weeks in Florida.

Dr. A. H. Grigg, of Beckley, recently returned from a business trip to Philadelphia.

Dr. T. F. Garrett, who was located at Sprague until recently, and who is now in Virginia, will return to his former location about April 1st.

The new building at the corner of Quarrier and Broad streets at Charleston is completed and is known as the Professional building, being occupied almost exclusively by doctors and dentists. The following doctors have their offices there: Drs. G. B. Capito, H. L. Robertson, B. S. Preston, W. W. Point, H. G. Nicholson, W. A. Thornhill, A. C. Vandine, F. P. Weltner, W. S. Shepherd and M. L. Dillon and Churchman & Arbuckle. Dr. V. T. Churchman has one whole wing of the fourth floor for his private eye, ear, nose and throat hospital.

Charleston is getting its share of new doctors. Only six new medical men have located there in the past three months.

Dr. C. F. Sayre, recently of Charleston, has accepted a position with the Campbell's Creek Coal Co., as mine surgeon at Putney, W. Va.

Dr. G. H. Barksdale, of Charleston, president of the State Anti-Tuberculosis League, made the principal address at a mass meeting during "Health Week" at Point Pleasant, W. Va.

Dr. J. E. Robins, of Charleston, is spending a few weeks in Florida.

The Sisters of Saint Francis who established the Saint Francis Hospital in Charleston ten years ago and who have built two additions to it to meet the needs of the city, have turned over the management of the institution to the Sisters of Saint Joseph, of Wheeling.

At the meeting of the Southern Medical Association held in Louisville, in November, a section on Neurology and Psychiatry was organized with the following officers: Chairman, Dr. Tom A. Williams, Washington, D. C.; Vice Chairman, Dr. John J. Moren, Louisville, Ky.; Secretary, Dr. Paul V. Anderson, Richmond, Va.

Dr. T. W. Moore, of Huntington, has returned from New York where he spent two weeks attending various clinics. Dr. Moore was accompanied by Mrs. Moore, who stopped over in Washington on their return home.

Dr. Powatan Trueheart, of Sterling, Kansas, uncle of Dr. C. T. Taylor, of Huntington, spent some time with him recently. Dr. Trueheart is a surgeon of prominence in Kansas, and was formerly a professor in a medical college in Kansas City.

Dr. and Mrs. I. T. Peters, of Mayberry, were visitors in Huntington for ten days recently.

Dr. J. E. Rader, of Huntington, attended clinics in the east for two weeks in January.

The Williamson Hospital building will be taken over by Drs. H. D. Hatfield, A. K. Kessler, J. E. Rader and C. T. Taylor, of Huntington, and operated as a private institution, it is reported. Improvements and equipment to the value of $40,000 will be added to the Williamson building.

Dr. John T. Elder, son of the late Dr. B. D. Elder, died at Syracuse, Mo., January 28, and was brought to Huntington for burial. Dr. Elder was born November 11, 1871, at Nelsonville, Ohio, and was graduated from the medical college of Ohio State University in 1890. He was connected with the Athens State Hospital for two years, when he moved to Syracuse. Both he and his father were well known in southern West Virginia.

Dr. Fred Marcum, of Ceredo, who has been seriously ill for sometime, has gone to French Lick Springs to recuperate.

Dr. William De Hart Fitzhugh, of McComas, had the misfortune on January first of having his horse fall with him while making calls, and sustained a Pott's fracture of the left ankle. He is now able to get around on crutches and expects to resume his practice soon.

Dr. H. H. Staats, of Spencer, W. Va., has located in Charleston, W. Va.

Dr. F. P. Weltner has opened an office in Charleston, W. Va., for the practice of eye, ear, nose and throat.

The West Virginia Hospital Association held a business meeting in Charleston, February 15th.

ADVERTISERS' NEWS NOTES

Owing to unsettled conditions in the drug markets during the world war, new catalogs and price lists in this field were rather few and far between. The new list now ready, of Abbott pharmaceu-

ticals and medicinal chemicals, will, therefore, be welcomed by the profession as it contains many of the newer council-passed items unobtainable prior to the war, except from foreign sources, but now made available through scientific research by an American firm. A copy will be sent free on application to The Abbott Laboratories of Chicago.

THE KERNELS OF WHEAT

The busy physician cannot read everything that comes to his desk. The varied assortment of pamphlets, circulars and other printed matter that comprise a considerable portion of his daily mail often receives but scant consideration unless there be some conspicuous feature in it to fix his attention. But even chaff may contain kernels of wheat — a thought suggested by the receipt of an exceedingly attractive little pamphlet just issued by Parke, Davis & Co., bearing the superscription "Adrenalin in Medicine." Here is something which even the busy practitioner can read with pleasure and profit. It sets forth in the briefest possible manner all that is known respecting the properties and therapeutic uses of Adrenalin. By the bye, it is a fact not generally appreciated that the vast literature we possess today on the functions and medical adaptations of the suprarenal body hinges almost absolutely upon the study of Adrenalin by many laboratory and clinical workers in many countries.

We urgently advise our readers to send for a copy of the booklet for immediate perusal and future reference; a descriptive announcement will be found in the advertising section. Parke, Davis & Co. will cheerfully honor all requests for the booklet from medical men.

Society Proceedings

Dartmoor, W. Va., Jan. 28, 1921.

Editor Medical Journal:

The Barbour-Randolph-Tucker County Medical Society met in Rotary Club Rooms January 25th, 3 p. m.

Present Drs. Perry, Butt, Pierce, Gray, Bosworth (A. S.), Fredlock, Irons, Talbott, Wilson and Owens; Dr. Jno. T. Huff visiting.

Dr. Perry presided. Minutes of previous meeting were read and approved.

Letters and communications were read. Letters from Drs. Ashworth and Dr. Miller, asking that the Society take definite action toward defeating the bill introduced in the State Legislature to license chiropractors. Drs. Irons, Pierce and Butt were appointed to draft resolutions expressive of the views of the Society and the secretary was instructed to cite cases of dangerous malpractice, of which members of this Society know by chiropractors.

A letter from Dr. R. H. Powell, a former member of the Society, asking the endorsement of him as an applicant as superintendent of the Miners' Hospital at Fairmont was read. The Society unanimously endorsed Dr. Powell and instructed the secretary to write Dr. Powell.

Letters from Dr. J. W. Bosworth, expressive of his regrets of his inability to attend the banquet, and of his good wishes for the Society were read.

Dr. Butt read a resolution relative to malpractice suits, which was adopted.

"Whereas, we note with apprehension, an increase in the number of damage suits being brought against members of our profession, and

"Whereas, it is a well known fact that an overwhelming majority of these

suits are brought by persons having no just claim whatever, being in fact merely a form of legalized hold-up; and

"Whereas, we note with humiliation and shame, the fact that in some localities in addition to the well known pernicious activities of low class parasitic lawyers, certain suits have been aided and abetted by members of our own profession; and now therefore be it

"Resolved, That we, the members of the Barbour-Randolph-Tucker Medical Society, declare it to be unethical for our members to aid or abet in anyway whatsoever any suit for damages against any member of our profession within or without our bounds."

Dr. Wilson read Dr. Golden's Eulogy of Dr. Yokum, at his funeral, and also Resolution of Regret in memory of Dr. Humboldt Yokum.

The report was approved and a copy directed to be sent to the family, and also recorded in the minutes.

Treasurer's report read and approved. Balance on hand $91.89. The bill for 1920 salary and postages ordered paid.

Dr. Butt read on excellent paper on "The Acute Abdomen."

Dr. A. S. Bosworth read a brief but well prepared paper, "The Control of Contagious Diseases."

Dr. Gray gave a talk on "Health Notes." Dr. Gray being city health officer, and Dr. Talbott county health officer, both made an earnest appeal for the support of the physicians and aiding in preventive medicine. They especially asked co-operation in prompt reporting of contagious diseases.

Dr. Butt made a protest against the careless use of the clinical thermometer. He is convinced that typhoid fever is often carried by use of the clinical thermometer, being used under the tongue, instead of the axilla, as it always should be used.

Society then adjourned to meet in Elkins at April meeting.

Banquet at 8 p. m., Dr. Huff, 88, and in practice, the guest; thirty-five banqueters.

J. C. IRONS,
Secretary.

A TRIBUTE TO THE MEMORY OF DR. HUMBOLDT YOKUM

By DR. WILLIAM W. GOLDEN

Read at Dr. Yokum's Funeral at Beverly, Oct. 1, 1920.

To his medical associates, as well as to his family and friends, Dr. Humboldt Yokum was known as "Hum;" and as Hum we shall always think of him with all the affection of comradeship that it implies. For years he was one of the boys who carry the heaviest burdens of the community and with responsibilities so crushing that it is very exceptional indeed that any of them attains the allotted age of three score years and ten. Hum was the best physician that this section of West Virginia has produced. Few were the medical men in his day who had the preliminary education which he had, and few were the medical men who had the medical education and training which he had. Along with these advantages he had the benefit of his father's great fund of clinical experience and a heritage of a keen and rugged intellect. Thus equipped he for many years rendered wonderful service to the sick and afflicted of this and adjoining counties. Hum would have equalled the best of the medical profession, had he located in some of our largest cities and have achieved fame there, but he chose to serve his own people. Rough weather, roads all but impassable, swollen streams

and other physical hardships he ignored in the face of a call to duty. Many a time riding side by side with him across these rough mountains to or from a sick call I have found him asleep in the saddle, often the only sleep he was able to get for nights in succession. I have met with him in the homes of the well to do but equally as often in the homes of the very poor and lowly. He loved scientific medicine and abhorred incompetence. Although circumstances had gradually led him into numerous business undertakings, to the very last he loved his profession, and nothing that he has achieved in other lines of endeavor has equalled the pride he had in the medical profession. It was only a few weeks ago that in intimate conversation he prided himself on the fact that he and his father practiced medicine for over three-quarters of a century, and expressed the hope that one of his children will be able to continue the association of the name of Yokum with the practice of medicine. It is outside of my scope to touch upon any other phase of Hum's life outside of the medical, but I will add that his loyalty to his friends knew no bounds. He was a true and devoted friend, and many of us will mourn his departure as a personal loss.

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RESOLUTIONS OF RESPECT IN MEMORY OF DR. HUMBOLDT YOKUM

At a meeting of the Barbour-Randolph-Tucker County Medical Society held in Elkins Jan. 25, 1921, the following resolutions were offered by Dr. W. W. Golden and unanimously adopted:

"Whereas, the Giver of all life in His infinite wisdom having called from his earthly tabernacle the spirit of Dr. Humboldt Yokum, we, the members of the Barbour-Randolph-Tucker Medical Society, bow in humble submission to the divine will, and offer the following resolutions of respect in memory of our departed brother:

"Resolved, That in the death of Dr. Yokum the medical profession of which he was long an able and active member has suffered a distinct loss, and the people among whom he ministered an irreparable one.

Dr. Yokum was a man of many sterling qualities, both of mind and heart, a very capable man which led him into many activities outside of his medical profession in all of which he was most successful, such as farming, live-stock raising, real estate enterprises, banking and public affairs generally. While not a member of any church, he took a deep interest by way of financial help in building churches in his own community, especially that of which his wife is an active member and his children attend, not neglecting to be helpful to other churches of different denomination and exercising his influence towards securing able pastors to minister to the spiritual wants of the people. A man of excellent education but never a teacher himself, he was ever active in public school affairs, serving as a member of the board of education several years, seeing to it that his town and district were provided with good school buildings and the best teaching force available. In all civic affairs he was an active participant and in these his activities will be greatly missed.

"Resolved, That while he is greatly missed by his people in general, yet the greatest loss is to his own immediate family; and to them we extend our most heartfelt condolences.

"Resolved, That these resolutions be spread upon the records of the Society and a copy be sent the bereaved family."

The Kanawha County Medical Society met in the assembly room of the Kanawha hotel Tuesday evening, January 18, 1921, and the following officers were installed for the year: President, Dr. J. E. Cannaday, Vice President, H. G. Nicholson; Secretary and Treasurer, E. Bennett Henson; Censor, G. H. Barksdale, B. S. Preston and P. A. Haley.

A very interesting program was heard. Dr. G. H. Barksdale read a paper on "Pulmonary Tuberculosis" and Dr. W. S. Shepherd gave an account of the tuberculous as seen by the ear, nose and throat specialist, and Dr. J. W. Moore read a paper on "Tubercular Meningitis." The papers were discussed by Drs. Preston, Shawkey and Irwin.

Dr. McClinic, of Roncerverte, W. Va., a member of the legislature, gave a talk on medical education and what changes should be made for better co-operation of the various state departments.

Dr. R. T. Davis, State Health Commissioner, asked the Society to aid the health council in obtaining an increased appropriation from the legislature. A committee was appointed to aid in every possible way.

Dr. Ray Kessel, Dr. S. W. Bull and Dr. A. L. Parsons were elected to membership in the Society.

TUESDAY, FEBRUARY 1ST, 1921

The members of the Kanawha Medical Society listened to a most excellent paper on "Appendicitis Complicating Pregnancy," by Dr. Robert K. Buford of the Sheltering Arms Hospital, Hansford, W. Va. His original work on the normal white cell count in pregnancy is especially interesting.

Dr. W. A. Thornhill read a paper on "Radium—Its History and Uses," which was very instructive.

Dr. G. B. Capito, who formerly practiced at White Sulphur Springs, but who has now re-located in this city, was reinstated in the Society. Drs. Weltner and Law were elected to membership.

Dr. R. H. Dunn reported an unusual case of abdominal pregnancy in a woman who has already had one operation for the same condition less than a year ago.

E. BENNETT HENSON,
Secretary.

Bluefield, W. Va., Jan. 20, 1921.

The Mercer County Medical Society met in Dr. A. D. Wood's office, in the Thornton building, with Dr. C. T. St. Clair in the chair and Dr. T. E. Vass acting as temporary secretary.

Under clinical cases Dr. E. W. Horton reported a severe sawmill accident of Swanson Osborne, a boy of fourteen years of age, who had his left arm, scapula and one-third of his clavicle torn from his body about two months ago. The boy had been operated on and treated at Mountain View Hospital by Dr. Horton. The skin flaps had united very nicely and the boy had been attending school for the past month.

The following officers were elected for the ensuing year: Dr. W. C. Slusher, President, Bluefield; Dr. H. C. Hays, First Vice President, Princeton; Dr. J. B. Kirk, Second Vice President, Bluefield; Dr. H. G. Steele, Secretary, Bluefield; Dr. Thos. E. Peery, Treasurer, Bluefield; Dr. T. E. Vass, Censor for three years, Bluefield; Drs. J. B. Kirk and C. T. St. Clair were elected as delegates to the state meeting at Charleston, to be held in May, 1921; also for the year 1922.

The resolution, in memory of Dr. E. H. Thompson, read by Dr. Hare and adopted by the Society, is as follows:

RESOLUTIONS ADOPTED BY THE MERCER COUNTY MEDICAL SOCIETY IN MEMORY OF DR. E. H. THOMPSON

From time to time we are called upon to pay our last respects to a comrade, a friend, or someone who is near and dear to us, and we, of the Mercer County Medical Society, have attempted in our humble way, to express our loss and bereavement upon the going of each of the several brother practitioners who have dropped out of our daily lives. However, the attempts have been futile, for we have not the command of language to give expression to that which lies deep within our hearts, so the inadequacy of our expression is but the evidence of the eloquence of our feeling.

We are now called upon to pay our last tribute to our brother practitioner and friend, Dr. E. H. Thompson, and take this occasion to give utterance to our appreciation of his virtues, and to bear testimony to his many high qualifications, not only as one of the leading members in our Society, but as one of the foremost men in our section and state.

The vast multitude that availed themselves of the privilege of looking upon his face for the last time and quietly following him to his last resting place, was a tribute of which any man should be proud, and was but one of the many evidences of the high esteem in which he was held.

We, who have known Dr. Thompson for years, and have been thrown in close and almost daily contact with him and his daily work, and some of us who were friends with him in college days, believe we can, in a measure, appreciate his worth.

It has been largely through his untiring efforts that we have a County Medical Society, of which we are proud, and which our State Society looks upon as being one of the most active in the state. Dr. Thompson was a charter member of our County Society and filled almost all of the offices to which we could elect him. His unstinted services were always of the very best, for he gave the Society a place of unusual warmth in his affections.

Dr. Thompson was slow to anger and was a man that was too big to hold grudge or malice; he was a man that loved home and his home life, and that one, so far-reaching word, "Home," with all that it holds near and dear, was no doubt, the innermost thought in his mind when he met with the accident which led to his death.

We feel that he is still with us, for we realize that the forces put into action by him are as indestructible as matter and will continue to live in our memories and lives. He will need no monument of marble or stone to perpetuate that memory, for he and his life's work, established in the hearts of those who knew him, a monument that will ever be green.

In the going of Dr. Thompson, we know that he has paid the price that the privilege of life exacts from all things that live, it being decreed by Nature that man's life be of limited time. His passing did not make just a slight ripple upon this great Ocean of Life, but a vast wave of regret and sorrow, for we can truly say that his death was a great loss, not only to those with whom he came into daily contact, and who knew him best, but to many others, for his influence was far reaching, beneficial and uplifting.

We feel that the greatest thing which can be said of a man, when death comes to claim him, after looking back upon his life and life's work, is, that he has

been a success, and we feel that in every way, Dr. Thompson's life was a "success."

Dr. Thompson was loved by many, both far and near, he himself loving in return, for he was a lover of all humanity, and love with him was not a weak sentimentality, but something strong and vital. He loved humanity, not in the abstract, but in the person of all those with whom he came in contact, so they—

Buried him in the sunshine,
Tho his peerless soul had flown
To that fair land upon whose strand
No winds of winter moan.
Sublimer heights, purer delights
Than mortal tongue could tell;
So they buried him in God's sunshine,
In the light he loved so well.

—

His body will soon pass back to Mother Earth, and will be claimed as her own, so that she may absorb and utilize the elements of his being, of which he was trustee, in her perpetual process of creation, and so long as there is even an atom of his being to nourish and give coloring to the flowers, of which he was so fond, their aromas and sweet odors shall symbolize the beauty, the brightness, the lovliness, usefulness and the goodness of his life. Thus—shall he find immortality in the flowers of the field.

Resolved, That in the death of Dr. E. H. Thompson, the Mercer County Medical Society has lost one of its most valuable officers and members.

Resolved, That we tender to his bereaved family our sincere and heartfelt sympathy.

Resolved, That a copy of this memorial be sent to his family.

Resolved, That a copy of these proceedings be published in both the Daily Telegraph and the State Medical Journal.

O. S. HARE,
J. B. KIRK,
Committee.

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It was decided by the members present that a copy of these resolutions be made a part of the minutes of this Society.

Dr. Slusher was conducted to the high seat of honor by Drs. Wallingford and Hays, after which he made us a very nice acceptance speech.

Dr. Vass was authorized by the Society to pay the Alexander bill for $25.00, for floral tribute to Dr. Thompson, and also a bill of $5.00 for stamps and notices sent out for this meeting.

Dr. Steele read a letter from State Secretary, Dr. Robert A. Ashworth, of Moundsville, requesting that all papers to be read at the next state meeting must be in his hands by April 1st. He also notified us that there has been introduced in the legislature, at Charleston, a bill for licensing chiropractors, requesting us to make an organized fight against this, pass resolutions objecting to it, and insist on our legislature passing a bill forever banishing it from this state.

The president appointed on this Chiropractors Committee Drs. Hare, Kirk, Vass and Steele, and requested them to draw up suitable resolutions setting forth our reasons for objecting to the passage of this bill and then send a copy to each of our representatives of this county and district in the senate and house, which was discussed freely by Drs. Hare, W. H. and C. T. St. Clair, Vass and Slusher.

The application for membership of Dr. B. W. Steele, of Mullens, W. Va., and

the transfer of Dr. J. O. Bailiff, of Chicago, Ill., now located at Princeton, W. Va., were acted upon favorably by the members of board of censors and elected as members of this Society.

The following members were present: Kirk, Hare, C. C. Peters, J. R. Vermillion, W. H. and C. T. St. Clair, Steele, Bishop, Wood, Horton, Vass, Hays and Wallingford.

The secretary announced programs for three months, as follows:

For February—Bluefield—Dr. C. T. St. Clair, Dr. J. R. Vermillion, Dr. J. B. Kirk.

For March—Princeton — Dr. W. H. Wallingford, Dr. E. W. Horton, Dr. A. H. Hoge.

For April—Bluefield—Dr. C. M. Scott, Dr. G. L. Todd, Dr. W. H. St. Clair.

There being no further business the Society adjourned to meet in Bluefield, February 17, 1921.

H. G. STEELE,
Secretary.

MEMORIALIZING THE DEATH OF DR. WOODFORD HINZMAN

Dr. Woodford Hinzman died at Terra Alta in November, 1920. He was a native of Lewis county and soon after his graduation from the Baltimore College of Physicians and Surgeons located near his home at Gaston. After two years he went to Troy where he practiced his profession for about eight years. He left there on account of failing health and during the last eight years has been on the medical staff at the State Tubercular Sanitarium.

Many of the members of the Lewis County Medical Society of which he has been a member for the past eighteen years enjoyed an intimate acquaintance with them. To them he is remembered as a physician of unusual attainments, one with an unselfish but very thorough fondness for the work of his profession, thereby placing hundreds of unfortunates, as well as their friends, under lasting obligations.

After contracting tuberculosis his usefulness to others did not cease. Until a short time before his death he was active in his profession in the institution mentioned above. We are advised that he always manifested a keen and intelligent regard for whatever would make his fellow sufferers more comfortable and that all with whom he came in contact regarded him as a personal friend in whom they had implicit confidence.

His associates in the Lewis County Medical Society desire to record their appreciation of his fellowship, his service to the state and its unhappy wards and to commend the splendid devotion and intelligent interest which characterized his professional life, as well as his splendid Christian character. They desire, too, to put on record permanent minutes of the loss they feel personally and to convey to the family of the deceased the sincere expression of their sympathy.

Such men and such careers are rare and deserve to be held in grateful and reverent recollection.

J. G. PETTIT,
W. P. KING,
T. F. LAW,
Committee.

January 11, 1921.

The Raleigh County Medical Society convened in regular session in the Chamber of Commerce, Beckley, W. Va., Friday evening, January 21st, with Dr. E. S. Dupuy, President, in the chair. The following members were present: Drs. E. S. Dupuy, F. S. Stansbury, Robert Wriston, M. C. Banks, G. C. Merriman,

A. H. Grigg, U. G. Cook, J. H. Hoskins, C. S. Smith, K. M. and D. B. Jarrell. Our Society was honored with the presence of two visitors, Dr. F. C. Hodges, of Huntington, and Dr. Wm. A. Thornhill, of Charleston.

Dr. F. J. Moore, of Affinity, was received into the Society.

After the regular routine of business was disposed of very interesting papers were read by Drs. F. C. Hodges, of Huntington, on "Aids in Laboratory Diagnosis," and Wm. A. Thornhill, of Charleston, on "Radium in the Treatment of Disease." Both papers were thoroughly enjoyed and the Society by a rising vote expressed its appreciation to Drs. Hodges and Thornhill for their presence and interesting papers.

The meetings of the Society in the future will be on Monday night of each month instead of Friday nights as heretofore. All meetings during the fall and winter months will be held in the Chamber of Commerce, Beckley. During the spring and summer months the Society intends having some of the meetings in various parts of the county—endeavoring to reach all of its members.

CHARLES S. SMITH,
Secretary.

A meeting of the Tyler County Medical Association was held in Sistersville, W. Va., on February 17, 1921. Interesting talks were given by Drs. M. M. Reppard, of Middlebourne, W. Va., and J. O. Eddy, of Friendly, W. Va. The county association had as guests Drs. Robert A. Ashworth and Chas. G. Morgan, of Moundsville, W. Va., officials of the West Virginia State Medical Association, each of whom gave an interesting talk on the value of organization.

The election of officers resulted as follows: President, V. H. Dye; Vice President, J. M. Boice; Secretary, H. P. West; Censors, M. M. Reppard, J. O. Eddy, E. C. Jones; Delegate to State Meeting, C. V. Little; Alternate, V. H. Dye.

Plans for the March meeting were discussed and a program committee elected. An interesting and enthusiastic session is expected.

Medicine

AXIOMS ON SYPHILIS

Salvarsan every week or ten days for six or eight injections in early cases of syphilis, is good judgment, but in cases of three or four years duration it is usually unnecessary, unless special indications are present.

If we ever expect to cure syphilis we must treat our syphilitics when they are negative. An early negative Wassermann is gratifying, but do not let it influence you in suspending treatment. Three years is the time limit in such cases, and more if positive. Late cerebro-spinal manifestations are prevented by early, regular, energetic, systematic treatment.

The time to cure syphilis is in the primary stage. Two months of energetic treatment then is worth two years treatment later.

When possible treat all syphilitics intravenously and intramuscularly.

Syphilitics that receive too much mercury become anemic. The thing to do stop mercury and give iron injections.

A great many cases of optic neuritis are found in negative Wassermann's, but known syphilitics.

Treat the patient that has syphilis as well as the disease. Don't cure the patient of his syphilis and kill him with the treatment.

In eondylomata lata keep dry and give salvarsan.

In making a diagnosis between syphilis and tubereulosis of the testiele remember that as a rule syphilis involves the testiele proper first, is painless and tuberculosis first attaeks the epididymis.

Snuffles in a new born infant suggests syphilis.

Treat the patient as well as the disease and in doing so you may surprise yourself by euring both.

Remember that syphilitie involvement of the cerebrospinal system may oeeur quite early, even before the roseola has appeared.

Surgery

SURGICAL TREATMENT OF BUNIONS

Dr. C. H. Mayo, Roehester: Several methods of treatment are resorted to aeeording to the eonditions present. The usual operation performed is one whieh I advoeated many years ago. A curved ineision is made eonvexly upward over the inner side of the joint. The skin is defleeted downward, the bunion bursa is disseeted forward and the joint is opened, the burst being left attaehed to the inner surfaee of the first phalanx. One-quarter ineh of the head of the artieulating surfaee is removed by bone saw or large bone-fitting foreeps. This relaxes the extensor and the flexor tendons. The bony projeetion on the inner side of the head of the great toe is removed, and the bunion bursa is turned into the joint and held by sutures of eatgut whieh also serve to straighten the great toe, thus removing the valgus. The wound is elosed without drainage. If flatfoot eomplieates, the head of the bone should be preserved. The bunion bursa, the overgrowth of bone and the sesamoid bones should be removed, however. If the hallux valgus is marked, the tendon of the extensor hallueis longus should be lengthened about one-fourth ineh. If the great toe is bent downward, the sesamoid bones ean be removed with a knife or sharp pointed seissors, if they are grasped with strong tenaeulum foreeps. The sesamoid bones and the artieulating surfaee should not be removed from the same foot. The patients should be up at the end of the first week, using the heel and outer side of the foot. In from fourteen to twenty-one days, a stiff soled shoe may be worn. Instruetions should be given to every patient as the size and shape of shoes to be worn following operation.

RESECTION OF IMPASSABLE STRICTURE OF URETHRA

The method of treatment deseribed by Harris is founded on the following basie principles: (1) that the perineal portion of the male urethra may be split up on its floor to any desired extent and thus eonverted into a "ribbon;" (2) that any damaged portion may then be reseeted and the ends of the "ribbon" sutured together; (3) that, finally, provided no urinary eontamination of the wound be permitted, the urethra will resume its tubular form naturally and in due eourse.

ARE WE JUSTIFIED IN REMOVING A COMPARATIVELY HEALTHY GALLBLADDER?

W. H. Magie (*Jour.-Lancet,*) from a personal experienee of 300 operations upon the gallbladder and bile duets, urges preservation of the gall-bladder in at least a majority of eases. His con-

tention is that it has two functions which should be conserved if possible, viz, the storage of bile and the regulation of pressure in the biliary system. The diseased gallbladder also has great recuperative power. It is generally conceded that cholecystectomy has a much greater mortality than cholecystostomy. The objection brought against the latter that many cases must be re-operated is not borne out by his own experience (only 5 per cent. having required another operation). In his opinion long continued drainage after cholecystostomy, followed by daily irrigation of the gallbladder after removal of the drainage tube, contributes greatly to the thorough and complete cure of the pathological condition. Irrigation is also desirable for the purpose of washing out any overlooked stones that may have been left.

Book Reviews

TEXT-BOOK ON THE PATHOGENIC BACTERIA AND PROTOZOA

Ninth Edition, Revised

A text-book upon the Pathogenic Bacteria and Protozoa. For students of medicine and physicians. By Joseph McFarland, M. D., Professor of Pathology and Bacteriology in the University of Pennsylvania. Ninth edition, thoroughly revised. Octavo of 858 pages with 330 illustrations, a number of them in colors. Philadelphia and London: W. B. Saunders Company, 1919. Cloth $4.75 net.

This is a well known work by a distinguished author and teacher, designed for the use of both the student of medicine and the physician. This, its ninth edition, has been prepared for the purpose of eliminating whatever of error may have been found in the previous edition and of adding much of new matter found necessary to bring the book up to date. In pursuance of this purpose the type has been entirely reset. For these and other obvious reasons it will be found invaluable as a text-book and guide for the use of students, whether tyro or old practitioners.

THE DISEASES OF INFANTS AND CHILDREN

The Diseases of Infants and Children by J. P. Crozer Griffith, M. D., Ph. D., Professor of Pediatrics in the University of Pennsylvania. Two octavo volumes totaling 1,542 pages with 436 illustrations, including 20 plates in colors. Philadelphia and London: W. B. Saunders Company, 1919. Cloth, $16.00 net.

This excellent and very complete work of Dr. Griffith's, in two volumes, assumes almost encyclopediac proportion, in that it presents a very comprehensive summary of our present day knowledge of that very important branch of medical practice, pediatrics. The book is printed on good stock, in legible type and the illustrations are well adapted to the illumination of the text. The subject matter is well arranged and gives evidence of much practical personal knowledge as well as extensive research. The page foot bibliography system has been adopted. This is believed to be much more convenient and to be preferred to that in the form of an extensive appendix at the end of the chapter or of a general one at the end of the volume. Numerous feeding formula with caloric values

are given and tables of dosage in both systems (metric in parenthesis) add to the mental comfort and convenience of the reader who may not be thoroughly conversant with both. The former almost universal practice of neglect of the mental hygiene of the child is deprecated and its important bearing on the development and welfare of the individual is discussed at some length and is shown to be of more importance than that of the hygiene of the body in an equal if not a majority ratio of children. In this connection it seems probable that a well digested knowledge of endocrinology would be of value in both cases. Little fault is to be found with the work as a whole. It is a valuable source of instruction for the student, and a great convenience in the library of the general practitioner who may have occasion to refresh his mind at times.

ORTHOPEDIC AND RECONSTRUCTION SURGERY

Orthopedic and Reconstruction Surgery, Industrial and Civilian, by Fred H. Albee, M. D., F. A. C. S., Professor and Director of Department of Orthopedic Surgery at the New York Post-Graduate Medical School and at the University of Vermont. Octavo volume of 1138 pages with 804 illustrations. Philadelphia and London: W. B. Saunders Company, 1919. Cloth $11.00 net.

This book fills what for a long time has been "a long felt want" on a subject of vast importance which seems heretofore not to have been accorded the attention in college curriculum or hospital its importance merits. Within the last ten years and more especially since the great world war that which was recognized under the term "Orthopedic Surgery" has been extended and amplified to a great degree, and in such a manner as to emphasize the importance and desirability of combining in one treatise both the conservative and operative medical systems of treatment of the many conditions met with under that head. Illustrating the comprehensive design of this great work attention may be called to the fact that the first eight chapters with the exception of chapter five are taken up with the consideration of various tubercular diseases of the bones and joints and a description of the author's electro-operative outfit and other convenient operative instruments and the technique of their usage which is made so plain and simple that any surgeon possessed of a moderate degree of manual dexterity can successfully carry it out. Other chapters on such practical subjects as Focal Infections, Infectious Disease of Bones and Joints, Chronic Infective Adenitis, Infective Osteo-myelitis, Traumatic and other affections of the spine, Infantile Paralysis, Plaster Paris Technique, Military and Industrial Reconstruction Surgery. The serum treatment of epidemic polio-myelitis is given favorable mention and the treatment as administered by the Department of Health of New York City is noted, discussed and technique given. In the treatment of Arthritis Deformans and other local infections the older plans of treatment are thrust aside and the use of autogenous vaccines and sera together with endocrine therapy are commended in conjunction with suitable local treatment. Amputations, dislocations, nerve injuries, ununited fractures and bone grafting are handled in a masterly manner. The text is written in pleasing style and is abundantly illustrated. Altogether the author has placed the profession under deep obligation for this most excellent and very complete work.

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SOME RECENT ADVANCES IN TREATMENT OF RECTAL DISEASES

By Dr. R. J. Wilkinson and
Dr. J. M. Emmett,
Huntington, W. Va.

Read Before the West Virginia State Medical Society, Parkersburg, W. Va., May 18-20, 1920.

The diagnosis and treatment of rectal diseases should be left to the Rectal Specialist. However, at times the General Surgeon is called upon to treat these cases and when he assumes this responsibility he should not only be equipped with the latest diagnostic instruments, but should be able to offer the patient the most modern treatment.

Within the past few years the Rectal Specialists have done a great deal towards perfecting both the diagnosis and treatment of rectal diseases, and we General Surgeons should follow their teaching if we are to continue this work. In this brief paper we shall only consider the treatment of Hemorrhoids and Pruritis Ani.

For many years the accepted method of dealing with Hemorrhoids has been either their removal with the clamp and cautery or by the ligature method. Either of these methods call for a general anaesthetic (with its dangers) and considerable suffering following the operation. Owing to the hospital bills incurred and the loss of time from work this treatment was expensive from the standpoint of the patient. If an injection method was used it was done with the idea of producing a slough with its resulting scar tissue formation. This slough once started, we had no way of limiting its action and frequently it was necessary to deal with a secondary infection.

Doctor Terrell, of Richmond, Virginia, accidentally discovered while using Quinine and Urea Hydrochloride as a local anaesthetic in rectal work that it produced a definite fibrosis. Experimenting with it in the treatment of Internal Hemorrhoids he found that the

contraction of this scar tissue would obliterate the pile. He presented a paper to the American Proctological Society in 1915, reporting a large series of cases treated by this method.

Having limited our work to general surgery since beginning practice of medicine we naturally took very little stock in any method of dealing with hemorrhoids other than removing them by surgical means but upon the insistence of Doctor Terrell we decided to try the injection method. Since May, 1915, we have treated more than one hundred of these cases and the results have been equally as satisfactory as had we removed them by excision. The injection of Quinine and Urea Hydrochloride for cure of uncomplicated hemorrhoids has the following advantages: It is a reliable cure; it is painless; the treatments can be given in the office and only require a few minutes. There is no danger associated. The patient is allowed to continue at work.

In giving these treatments it is necessary to have a Brinkerhoff Speculum, Luer tuberculin syringe and head mirror. Make the injection at base of pile for if made too near sphencter muscle it produces considerable pain. It is advisable to begin with a five per cent solution, gradually increasing to twenty-five per cent.

Any external hemorrhoids that may be present should be removed one at a time, using novocaine anaesthesia. Other complications such as fissure, fistula, ulceration and the like, should be dealt with along accepted surgical lines.

Hemorrhoids are the result of constipation, in a large percentage of cases; therefore we should instruct our patients how to overcome this annoying condition.

There is no rectal condition that is as hard to cure as Pruritis Ani, and this can be attributed to the fact that we have been unable to determine its etiology.

In June, 1919, Terrell suggested that small obscure lesions in the anal canal were the causative factor in producing this intolerable itching and that by proper treatment these patients could be cured. After presenting this paper he discovered that Doctor Breach, of Pittsburg, had expressed a similar view in 1909. Quoting from Terrell's paper, "While the infected surfaces are largely hidden from view there are always openings above leading to them. To locate these small openings all folds of the anal canal must be straightened out so that every part can be inspected." He advises the use of Nourse Physiological speculem since this dilates from above downward. The infected area usually takes the form of blind pockets or sinuses with their openings near the ano rectal line extending downward under the skin.

The treatment consists of freely excising every sinus or pocket, establishing free drainage and allowing the wound to heal by granulation. The itching will not entirely subside until the wounds have healed.

These cases can be treated in the office, using Novocaine anaesthetic. Frequently we have failed to discover every sinus or pocket at first examination and this has necessitated the patient returning for further treatment. Occasionally we see patients suffering with itching associated with discharges from the rectum due to ulceration, etc. However, this itching must not be classed as a true Pruritis since it is mild in character and easy to cure.

SUMMARY

1. Every rectal case should be carefully examined before recommending treatment.

2. That the injection of Quinine and Urea Hydrochloride is a safe and reliable cure for uncomplicated Hemorrhoids. The treatments are painless and the patient does not lose time from work.

3. The etiology of Pruritis Ani has been established. These cases can be cured.

TUBERCULOSIS IN CHILDREN

By VICTOR L. WETHERBY, M. D.,
Welch, W. Va.

Read Before Joint Meeting of Medical Societies of Mercer, McDowell and Tazewell, Va., at Bluefield, Sept. 2, 1920.

Tuberculosis holds first place in the interest of general practitioners. Never should we examine a patient without having tuberculosis in mind. It is by us that incipient, readily curable, cases are discovered.

Probably in no disease has so little progress been made in the treatment thereof. When we consider the time, the money and the character of the workers, it seems depressing that no method of treatment has been brought out that is much of any improvement over methods of twenty years ago. I think all of us have been sitting back and expecting every day that some new discovery, probably some serum, would be brought to light to check the ravages of the White Plague. The proper procedure at this time is to take stock of the knowledge already at hand and actively do our utmost to seek out and treat the disease.

To my mind the most promising field is among children, and it is to that phase that I will confine my remarks.

We know that practically all careful autopsies disclose healed tuberculous lesions, usually around the hilum of the lungs, frequently in the abdominal lymphatics and other glands and organs. We know that these lesions are found with decreasing frequency in the younger subjects. The Von Pirquet reaction is of value, if positive, only in the very young. We may then conclude that in most instances the infection of tuberculosis enters in childhood, that it is arrested and that later it is made active because of some resistance lowering affection. Probably that accounts for the majority of cases of active tuberculosis except those the result of massive direct infection from direct association with a second or third stage patient.

It then seems obvious to me that we could accomplish much by more active treatment of the cases in children. Mostly they get well for the time being, of course, and without treatment, but the germs of tuberculosis lie dormant surrounded by a more or less hard wall of calcium. When, at some later date, the body defenses are called upon to resist an acute infection, the blood, after using its own calcium, will absorb that from around the tubercles, lymph will be brought in to revive the bacilli and then the fight against tuberculosis must be made anew. Perhaps the body defenses will win, perhaps the tubercle bacilli.

By keeping the possibility in mind it is surprising how many times we can pick the time in childhood during which the tuberculous fight is on. Remember that in childhood tuberculosis tends to be glandular so don't expect to find definite chest signs. A usual history is some-

thing like this: child about six, has always been well and strong, for past few months has not gained weight, appetite capricious, has night tremors perhaps, is somewhat nervous, at times apathetic, feels badly from time to time without definite cause. Catches cold easily and the colds hang on for several weeks. Upon examination child will be found thin, conjunctive pale, often bluish lips, throat slightly injected, tongue frequently slightly coated, few small glands in cervical region. Heart somewhat rapid with considerable increase after exercise, often slight temperature. Now in nearly every case it is during this period that tuberculosis is taking hold. What should be done. Personally I think the adenoid tissue in the back of the nose should be removed and if tonsils are diseased they should be taken out. The tonsils are often less important than the adenoids and will frequently come back to normal after the adenoid growth is excised. The tonsils stand the brunt of the mouth-breathing, they were not intended for this duty and often suffer in consequence. Far too often are the tonsils removed in young children, when the tonsil infection is mild, and it usually is in young children, the tonsils will recover when the adenoids have been attended to, and I believe healthy tonsils serve a useful purpose in the throat.

In addition to the removal of the adenoids I would have the child sleep in the open air, have milk and eggs between meals, and take calcium and some other preparation such as creosote or iodine. I usually give Calcreose for the combination of calcium and creosote. This is discontinued after two weeks, syr. of iodide of iron is then given for two weeks, after which the Calcreose is resumed. I certainly believe this active medication to be of benefit. What I hope for this treatment is practically the same that will happen without any treatment if a cure ensues—plus. The creosote I hope will act as an active germicide, the calcium I hope will cause a more dense wall to be thrown around the tubercle, to the end that what bacilli are encysted will be better protected from later calcium absorption and the bacilli, I trust, will be less numerous and less virulent.

I associate the increased incidence of tuberculosis in Italians and negroes with the fact that so many of their children are rachitic, nearly all relatively so, indicating a lack of calcium salts or calcium metabolism or both. Calcium, we know, is one of the important factors in the cure of tuberculosis.

In approximately 10% of the cases in children the infection is caused by the bovine type of the tubercle bacillus. Protection against this is absolutely afforded by insistence that all milk, unless from tuberculin tested cows, be boiled or pasteurized. We should never forget that possibility and should always advise the pasteurization of milk in families that have children.

It is, however, only a few of the children of the type I have described that come early to us for treatment. They are not sick enough, in the opinion of the parents, to need the services of a physician. The best way to get at them is through medical examination of school children. I think we are missing one of our greatest opportunities to do good when we do not insist that every school board employ a competent medical examiner. Every child in every school should have a monthly examination and a form-card to take home to the parents.

In addition to this medical examination every community should support a trained district nurse whose duty it should be to follow unfavorable report-cards by a personal visit to the home. She should also make regular visits to parents who are tuberculous and show them practical ways to better themselves and protect their children. Among the poorer classes a child with tuberculous parents has very little chance of growing to healthy manhood or womanhood. Our state sanitoriums should be vastly enlarged so as to care for all cases and of all degrees of illness. While these measures seem ideal, they have also been proven, time after time, to be practical, and all money so appropriated pays vast dividends to the community at large.

Only those that will not must foresee that the day is surely coming when preventative measures will mostly occupy the medical profession. It is well to get in line and make a start now.

SUMMARY

Admitted that most cases of tuberculosis have their beginning in children we should:

1. Through medical examination of school children search out the cases.

2. Have foci of infection and resistance lowering maladies such as tonsils and adenoids, removed.

3. Cases carefully supervised by a visiting nurse as well as by the family physician.

4. Give the child the benefit of active medication as well as general hygienic measures.

5. Take steps to have active conveyors of the disease in sanatoriums.

PURPURA HAEMORRHAGICA

By JOSEPH L. MILLER, M. D.,
Thomas, W. Va.

Read Before Barbour-Randolph-Tucker Medical Society.

It is not my purpose to go fully into detail of the wide variations of this interesting and little understood disease, which is treated more or less voluminously in most works on the subject. They all agree that it is not an uncommon disease, and therefore should be of interest to the general practitioner.

I wish to mention as briefly as possible the essential features of the disease, but more particularly of the Henoch type of which it has been my misfortune to see three cases. Of the milder type, Purpura Simplex, I have seen some five or six cases, for the most part secondary to rheumatism, all of whom recovered.

The best definition I have seen of Purpura is given by Anders as: "A blood dyscrasia characterized by the appearance of subcutaneous hemorrhages and hemorrhages from the mucous membranes."

PATHOGENESIS

The lesions vary from small petechiae to massive ecchymoses, the exact production of which is not definitely known, but certain facts have been developed by the more recent observers, namely, that there is no delay in the coagulating time of the blood in purpura, but a marked increase in the bleeding time. As for example in a purpura patient blood will continue oozing from a needle puncture of the skin for several minutes longer than from a normal person when it ceases in from one to three minutes. There is a marked and progressive decrease in the blood platelets and red cells.

Duke found in his cases a decrease of the platelets from a normal of four hundred and fifty thousand per cubic millimeter to less than ten thousand and in many of the cases to less than one thousand. In one case of Cureton's the red cells had dropped to 1,680,000 on the third day before death and continued to drop till they reached 310,000 just prior to death.

ETIOLOGY

The etiology is unknown, though the majority of mild cases of purpura are secondary to some other recognized primary infection such as malaria, rheumatism, the infectious fevers, etc. In the idiopathic or more severe types of the disease, various micro-organisms have been isolated by a number of observers, but there has been a considerable diversity in their findings. However, Kolb, Burch, Letzerich and others have found and described a bacillus that seems to be identical in their cases, and with which they have succeeded in producing the malady by inoculations of pure cultures into animals.

These findings lead us to the deduction that the disease is due to the destroying effect of some toxin of bacterial origin upon the blood, and may be either primary, or secondary to some other known infection which lessens resistance.

Of predisposing causes there seems to be a larger number of cases among children between the ages of three and fifteen years than among adults, and to affect females more than males. Most authors have classified the disease into a large number of types, but apparently without reason other than variation in symptoms due to the primary disease where known, or the severity of the case.

SYMPTOMS

The chief symptom peculiar to Purpura in all its various types is the hemorrhages into the skin and from the mucous surfaces of the body. The constitutional symptoms vary from none at all to those of the fulminating type which I will mention in detail as the three cases I wish to report belonged to this variety.

HENOCH'S PURPURA OR PURPURA ABDOMINALIS

The cases of this type present a fairly regular chain of symptoms in addition to the extensive hemorrhages under the skin and the hemorrhages from one or more mucous membranes, though in some cases it may occur from all of the mucous surfaces of the body.

In most of these cases there is prior to the appearance of the purplish spots on the skin, headache of considerable severity; furred, dry tongue; nausea and vomiting — sometimes obstinate; paroxysmal attacks of abdominal pain; abdomen hard and tender, particularly in the region of the transverse colon suggesting an obstruction; constipation followed as a rule by diarrhoea if the patient survives long enough; rapid pulse —110 to 150 at first full and compressible, later thin and thready; temperature usually 101 to 103, though may be absent for short periods; not infrequently there is an acute nephritis and enlarged spleen.

Osler states that the intestinal crises and enlargement of the spleen may be present and recur for months before the true nature of the trouble is manifest. Cases have also been reported that before the characteristic hemorrhages appeared were operated upon for appendicitis and ileus, with normal findings.

PROGNOSIS

Most of the milder types of the disease recover unless death takes place from the primary disease; however many cases have a tendency to recur from time to time over a period of several years. In the idiopathic cases the prognosis should be very guarded as most of the severe and many of the moderate cases die in from twelve hours to two weeks after onset. In a series of sixty-one cases of the Henoch type of all degrees collected by Osler, eleven of them being personal cases, thirteen died. The three cases I have to report here all died.

TREATMENT

Many kinds of drugs and various bacterial serums and vaccines have been used in the treatment of Purpura, and have been of little or no benefit, except in secondary cases, where the treatment indicated by the primary infection was used. In the more severe cases the only thing that seems to have given any results worth mentioning has been the use of human blood or blood serum by repeated injections subcutaneously or intra-muscularly every four to six hours in doses of 20 to 40 cc. Animal blood and serum has given a fair amount of improvement in some cases. Kerley reports a case of his in which he used 290 cc. of human blood serum during the first 24 hours and a total of 1,034 cc. during the week of treatment, with recovery. He says there is no doubt that the case would have terminated fatally but for this treatment. In none of my own cases was it feasible to use human blood serum.

CASE REPORTS

Case 1. My first case was some eighteen years ago in a woman about 43 years of age whose symptoms of headache, furred tongue, nausea, anorexia, abdominal pain and tenderness, constipation followed by diarrhoea, moderate temperature caused me to make a diagnosis of Typhoid Fever, of which we were having at the time more or less of an epidemic. She died about the end of the second week of the disease within 24 hours after the first appearance of the subcutaneous hemorrhages on the limbs and back and free hemorrhages from the mucous membrane of the nose, mouth, vagina, and intestines.

Case 2. The second case seen in the fall of 1917, was in a girl of 12 years, who gave a history of having had a milder attack at the age of 7 years which lasted about two weeks; and of having had occasional attacks of arthritis since then. For several days before the appearance of the hemorrhages she had intense headache, photophobia, anorexia, nausea, with severe vomiting at times, at first constipation, then moderate diarrhoea with severe abdominal pain at times, one shoulder and both knee joints painful and tender. Tongue brown and dry, temperature ranging from normal to 104 each day, and considerable delirium. The subcutaneous hemorrhages made their appearance first on the fourth or fifth day of the disease and consisted of single large spots on both calves of the legs and both thighs outer sides. These were followed in 24 hours by a few smaller scattered ones on the legs, upper part of chest and on the cheeks. The largest spots were about the size of the palm of the hand, others ranging from small petechiae to size of a dollar, and were a dusky purplish color. She died on the fifth day after appearance of hemorrhages in the skin, and during

last two days there were hemorrhages from the nose and vagina. The last 24 hours was in complete coma.

Case 3. The third case was seen last April with our president who had seen it first a few hours before. Late in the afternoon the patient, a girl of five years, was taken with headache, cramps, nausea, slight constipation, and furred tongue. Dr. Lanich was called and saw her about eight or nine o'clock that evening, at which time he thought the case as we all would have merely one of error in diet and treated accordingly. About three or four o'clock in the night the parents noticed that the child had considerable eruption on the legs and face of dark blue spots, and was no better of the other symptoms, most of which seemed worse, so they called the doctor again about 6 a. m. He called me at once and I saw the case with him a little over an hour later. When he saw her she was pulseless, had vomited several times, pain in abdomen severe, hemorrhages on legs to knees, forearms to elbows, face, and a few on the upper part of chest in front. Blood was oozing from the mucous surfaces of the eyelids and a few drops from the nose. When I saw her a little later she was becoming quite stupid but would pay attention to loud sharp commands, the cutaneous hemorrhages were appearing on the upper and front parts of the thighs, higher up on the back; temperature 102; a thready uncountable pulse at the wrist; tongue with heavy brown fur, and fauces and inner surface of cheeks deeply congested as though the blood was just ready to burst through. You could almost see the hemorrhages under the skin advancing. She died about an hour later in coma and almost the entire surface of the body was covered by the hemorrhages, which in this case appear to be very much more extensive than any cases illustrated in any of the several works to which I have access. Death occurred about 18 hours after appearance of the first symptoms and about six hours after the onset of the hemorrhages. The patient seemed to be a well nourished child and previous history was negative. Parents were healthy Slavs.

COLLECTIONS

By DR. JOS. A. PORTER,
Littleton, W. Va.

Read Before the Marshall County Medical Society.

The subject of collections should be a very interesting one to all doctors, in fact much more so than the consideration of fees, for while every medical man charges fees, not every one makes collections by any means, or at least collection commensurate with the fees charged. In the dear, old, dead days of the long gone past, the doctor was the idol of the community in which he lived, and no small part of his popularity was due to the fact that he never sent any one a bill. He would wear shabby clothes himself, and his wife would turn and make over her old dresses and retrim her old hats, and the children's clothing was handed down from the oldest to the youngest until it seemed that everything in this line had taken on immortality and continually chanted the words of the old song: "Men may come and men may go, but I go on forever."

Now this condition of affairs was due entirely to the lack of business ability in the old doctor, for he would make no effort to collect what was rightfully due him, thinking it was incompatible with the dignity of his profession to mention

money to any of his clientele. He would start out on Monday morning betimes, after leaving word with his wife whereabouts in the countryside he could be found at certain times, and riding perhaps an entire week; seeing here a case of pneumonia, there some typhoid fever, over yonder just back of that little strip of woodland helping some poor woman in confinement, down there in that deep and dark hollow, from which the fogs never seemed to clear away, seeing a hopeless consumptive, whose eyes shone with that unearthly light that showed only too plainly that her span of life was running very nearly to its close, and mayhaps coming home late on Saturday night with a shock of fodder behind him on the horse, or some oats, or a bushel of potatoes, or a ham or side of bacon to show as the amount of his collections for his entire week's work. And at last when worn out with attending to the wants of an inconsiderate community, with making night calls that were unnecessary, with worriment over his financial situation, he laid his head upon his pillow and slipping into the land of shadows, he left his wife and children to the tender mercies of a sympathetic and commiserating public. "Oh! he was a good doctor but he wasn't any collector," has been heard how many times, and we doctors used to think it was noble and self-sacrificing to take care of the professional dead beats and tightwads, and at the end of all earthly things mayhaps lie in a pauper's grave with the usual song for an epitaph: "He was a good doctor but he wasn't any collector." You have all heard it said that if you were the poor man's doctor, you were always the poor doctor, but I will paraphrase this, saying in this manner: "If you are the dead beats' doctor, you are always the poor doctor." I have known of cases where after long years of valuable service to a community the doctor would pass away, and those who had charge of his affairs were hard put to it to get enough out of his effects to pay the undertaker.

I remember a doctor of the old school, whom I once knew ,in the early years of my experience, as a medical practitioner. He was located in a little country village in Pennsylvania, along the Pittsburg and Philadelphia pike. He was an excellent man and never refused a call and through the chilling winds and pelting sleet and snows of winter, or beneath the burning sun of summer time, he would mount his horse or hitch up his buggy and go, no matter if the prospective patient owed him money or had refused to pay his bill, or was some poor impecunious wretch, whose poverty-stricken presence upon earth, seemed to cast a blight upon all with whom he came in contact. No matter if he lived in hovel or in mansion or was nearby or twenty miles away. No man or woman called in vain for help from this poor, noble minded physician. To go and stay all night by the bedside of some sick child was to him a rite to be observed as solemnly as any religious service chanted by surpliced priest or cloistered monk, and many a day and night he spent, or it might have been two days and nights, beside the bed of some poor woman in the awful throes and pangs of childbirth, and when, as it sometimes happened, and as it sometimes happens to all of us, his ministrations were in vain, and a soul slipped away from earth, leaving sorrowing friends and relatives behind, this doctor often remained to comfort and cheer the stricken ones who, but for him perhaps, would not have had one ray of light in all the darkness. And at last it happened that his health began to fail,

and the wasted cheek, and hectic flush and hacking cough showed that the Great White Plague had laid its fatal hand upon him. And yet with all those signs, which must have been plain enough to him, he still went on and on, and at last after a long lingering painful illness, died miserably. And of all the multitude he had comforted and succored during his useful lifetime, not one came near him to help him in his sickness and he died alone, unmourned, unhonored and unsung, and practically a pauper, notwithstanding the fact, that the people on whom he had lavished his attentions, and for whom he had given his life, owed him probably $30,000, and when it was noised abroad that his pecuniary affairs were in a bad state, and there were hardly funds to bury him, did these people come forward and pay their bills and help to give his body decent interment? They did not. They talked among themselves in whispers at his funeral, of what good he had done and how he would be missed and then would say: "He was a good doctor, but wasn't any collector."

These pictures have not been overdrawn, for they have come within my own personal experience. I have seen these things happen and so have all of you that have been in practice any length of time, and occurrences such as these should awaken within our breasts the instinct of self preservation, and activate us to such efforts as would preclude the possibility of such things happening to any of us. The doctor's collections are influenced by a great many factors, but I don' tbelieve there is any great danger of him being overpaid in any case, but the situation as it obtains at present can be ameliorated to a great extent and the poor overworked doctor will have more money to his credit, and very likely won't have to do so much unnecessary work.

Probably the greatest factor influencing the collection and of medical practice is the doctor himself. Ever since we have had doctors, it has been one of the tenets of the profession, in fact an unwritten law almost, never to ask for money no matter how long overdue the bill was, or how badly the money was needed, and if the poor fellow was compelled by force of circumstances to dun a former patient, he did it in such an apologetic way that the debtor had no other feeling than contempt for him, and likely would not pay him until he got good and ready and maybe not at all.

When I practiced formerly there were, I think, about thirteen doctors who were strictly ethical and we got together and organized a small local society independent of the county medical and each member thereof submitted a list of the names of those persons who, without good reason, were anyways dilatory in paying their bills. Any person who thus became listed could not obtain any service whatsoever from any member of the association. We had weekly meetings and were able to keep the dead beats tolerably well in line. They very soon discovered that they could not get any service until they had paid or made satisfactory arrangements to pay the old accounts. Many of them came up and paid and became decent citizens and those who did not pay up took their very undesirable selves to other doctors outside the association. Some doctors, it seems to me, are afraid to refuse a call, they will go anywhere even if they know the fellow is a notorious dead-beat. Personally I don't think it any kindness at all to give service to these people because they are ungrateful and if they get a

chance, they will give the doctor the worst of it every time. One of these gentlemen came to me one morning. He had raised me out of bed by making an unearthly racket at my door which peeved me considerably to begin with, and when I opened the door and saw who it was, I was madder yet. He said: "The old woman wants you to come up this morning." I said: "What's the matter?" He replied: "She is going to be confined." He owed me for a confinement done four years before, and a lot of other work, for his infernal family got everything that come along, and he made no effort to pay anything on account, although the lady herself had hinted several times that there might be other ways of reaching a settlement, and when he made the remark that she was going to be confined, I opened up on him and what I said to him was a plenty. I would not like to tell you in this paper what I did say to him, but he sneaked away and has not bothered me since, and this happened over two years ago. I don't know who does his work now, but it is a great satisfaction to know that he don't come to me.

It has been my experience that the best way to eliminate the dead beat is to quit doing anything for him. A doctor can always find an excuse not to go, and if the beat is a bad one, he can tell him outright why he won't go and give him a good cussing into the bargain. Sometimes, when the West Virginia breed comes after me, I have an urgent call over in Pennsylvania, and when the Pennsylvania type make their appearance, I must go immediately to the head of Rocky Run on a confinement and it always works. Some of them that I have trained only call me when absolutely necessary and always pay me cash. I have tried suing them and I believe it is a poor policy, because it stirs up the community against you. I remember one hardened sinner whom I sued for an account. By so doing I brought down an awful storm of criticism about my ears and one merchant in the town went so far as to lend the fellow 50 cents and his bicycle so he could go before the squire, who lived several miles away, and schedule on me. But as you all know "the Lord takes care of his own," and it so happened that he afterward stuck the same merchant for a large account, which filled my soul with an unholy joy and I thought, "The mills of the Gods grind slowly, but they grind exceedingly fine." It seemed to me that this was certainly an instance of retributive justice.

The attitude assumed by the doctor toward the laity has a great deal to do with his success as a collector. I don't believe that a doctor ought ever to lose an opportunity to impress upon the minds of his patients that he is not in business for his health and let them know that he expects his money promptly. I was taught a lesson along that line many years ago which I never forget, and since that time if there is any money floating around, I'm going to get some of it if possible, even if it has depreciated until a dollar is only worth 30 cents or less. In this case which I just mentioned, I was called one day to see a woman in confinement. I believe, if my memory serves me right, she was a Lithuanian and lived in a company house in a coal mining camp and you all know what that is. When I arrived I found a midwife in attendance, and here's another thing, I never go nowadays to help a midwife out of trouble unless they put one over on me, which they sometimes do. The midwife in this case had made repeated vaginal examinations, and would,

no doubt, have known just as much about the case as she did, had she stuck her finger in the coal bucket instead of the woman's vagina. She had assured the family that everything was all right but the woman's husband who, with all the disturbance and trouble necessitated by the confinement, could not establish satisfactory relations with a keg of beer, which he had on tap, because dissatisfied and came for me. When I arrived I found that the poor creature had been in labor for 24 hours, with the left shoulder of the child jammed down in the pelvis, the arm being born. I sent for help and when the doctor came had him start the anaesthetic while I washed up. The bed, instead of being set up as a Christian's bed ought to be, was propped up on empty powder cans and just as I was ready to commence operations, the woman going under the anaesthetic, gave a surge and down came the bed with an awful racket and I had to turn in and help set it up again, thus necessitating another washing up. In this case version was performed without trouble, and she was delivered of a large male child that had been dead for several hours. I had delivered the placenta and was just going to wash my hands, when the husband, who, no doubt feeling grateful and with visions of a glorious drunk floating through his mind, came forward and offered me ten dollars. I said to him, "Wait until I wash my hands," which I immediately proceeded to do. When I finished, I turned, reaching out my hand for the money, but the old man was nowhere in sight, nor did I see him again for four days, and he never did pay me anything, spending the ten dollars for a new supply of booze. I simply cite this instance to impress the fact upon all our minds to always take money when offered and not wait to wash your hands. I do not wish to be considered as lacking in Christian charity, or heartfelt sympathy for any of our worthy poor, because this is not the case, for I would do as much for a patient who was not able to pay as I would for Rockefeller himself, but there is a class of people, that the sooner they are eradicated from our clientele, the sooner the world will become a less profane place in which to live, and the better we as doctors will be off, mentally, morally, physically, financially and spiritually. and the better showing the bank account will be making for this class of patients take a considerable portion of the doctor's time, which he might as well be spending on someone who will pay him for his trouble.

A method of increasing collections might be developed by giving more attention to office specialties. Venereal diseases are a fertile field in which to make a start in this line. It is a well known fact that male members of the laity, I would not ascribe any such characteristics to doctors, will be much more solicitous concerning the physical condition of their respective virile members, than they will be over their soul's salvation, and if the members in question happen to be of unusual proportions, they take on additional value in the eyes of their admiring owners and they fondle them and coddle them as fond mothers do favorite children. I have seen a man, seemingly in the last stages of tuberculosis, come in with a gonorrhoea and say: "Doc, I've been a little unfortunate and I want you to fix the old boy of mine up," at the same time having a disease that was rapidly sending him to the boneyard and to which he gave no attention whatever. His lungs could go hang, he did not care so he had his gonorrhoea cured. Physicians as a rule

give little enough attention to this class of cases, and the poor victims of a mad passion make the rounds from one doctor to another, getting a few pills here, an injection solution there, a lecture on morality somewhere else and maybe winding up in the hands of some counter prescribing druggist or an advertising doctor who will bleed him to the limit. I knew of one of these fellows, who used to carry a large ad in a Pittsburg paper, who trimmed an Italian friend of mine for $400.00 for curing a case of gonorrhoea and then in the end the poor fellow did not receive a cure.

These cases do not want your sympathy and commisseration, but they want help and are always able and willing to pay a good fee if the doctor lets it be known that he will not do this work on credit. A little extra equipment will suffice. The doctor that wants to do this work ought to have a good cystoscope and some syringes for injecting the anterior and posterior urethra, a Janet-Frank for the anterior and a Bumstead for instillations into the posterior urethra and bladder, and when it becomes known that he is giving special attention to this class of cases, the cash returns will exceed the outlay for equipment many many fold. He will wonder where all the venereal cases come from. He will not be getting up all hours of the night to see someone's croupy baby or some old woman who will tell him she forgot to call him before he went to bed, and his peace of mind will be likened to that of the Cherubim and Seraphim, for he will not be wondering whether Bill Jones or John Smith is going to pay him for that confinement or that case of typhoid that he took care of two or three years ago. He should insist on these cases coming back for treatment at least every other day, and now the federal authorities will help to keep them in hand, and at this time he should give them personal treatment. He should not be too fastidious to take the organ in his hand and give an injection for the virile member should not be tabooed from the advantages of special treatment on account of the two special functions to which it is dedicated, that is, that of urination and propagation. These patients will willing pay $5.00 for the first treatment and $2.00 for each subsequent one and it seems to me a few of them coming steadily would make a very nice addition to the doctor's income and swell his collection account accordingly.

Syphillis could be taken care of in the same manner, with a little preparation on the part of the doctor. There is nothing to hinder him from making intravenous injections of any remedy used in syphilis in that manner. It does not seem practicable to me for the doctor outside of a laboratory to make a Wassermann or any of the modifications thereof because of the trouble of preparing amboceptor and antigen, and because the opinion of the man who is not making Wassermanns every day, and who would at any rate only make a few tests, is, in my opinion, not worth anything. He cannot very well keep sheep and rabbits around for making amboceptor and it takes about three weeks to make antigen and then maybe it is of no account when it is done. But there is nothing to hinder him from being able to demonstrate the treponoema in initial sores and wherever else practicable, and the State Department of Health is always ready and willing to make a Wassermann whenever necessary. I'll say if you treat this class of cases with the milk of human kindness, keeping in mind at the same time the brotherhood of man and the Fatherhood of God, they will rise up and call you

blessed, and you will prosper exceedingly. But you will not be able to do it, if you think the way to practice medicine, is to break your back, and run your legs off, tearing around over these West Virginia hills after an ungrateful, unsympathetic, unappreciative and undeserving public.

Another class of cases that could be made very profitable in office practice are disorders of the rectum and anus. A man usually gives a lot of attention to that portion of his anatomy. I might say not in the way of personal cleanliness, but in the way of physical well-being. Next to his wife, after his organ of generation, he loves his rectum and anus, and anyone who will take the time and trouble to relieve him of these ailments and they usually yield readily to some simple treatment, will fall heir to his everlasting gratitude and he will invoke the blessings of God on you and yours, and will go out into the highways and byways and lift up his voice in paeans of praise in your behalf to whosoever will listen to him.

In wish to say in conclusion that it seems to me that the matter of collections and a good income is largely up to the doctor himself, and the fellow who spends his time making visits for a dollar and furnishing the medicine, and doing confinements $5 or $10 under his neighbor's price and stealing a case wherever he can deserves just what he gets. A laborer is worthy of his hire or at least he used to be, and a man's services are worth just exactly the price he places on them. Doctors' fees have always been too low in this country, excepting in the cities, and there only a small majority of doctors get unusual fees. In my opinion, the medical profession never had a better chance than at present, to establish a schedule of reasonable prices and it seems to me it is imperative to do so at this time on account of conditions over which we have no control. No doubt such an action would stir up a storm of protest, for a little while, but the public cares nothing for the doctor and would not turn its hand to save him if he were only two jumps ahead of the sheriff. This is solely an age of commercialism and we doctors have got to waken up and get in the procession or our collections will continue to grow smaller instead of larger as they ought.

HERNIAS OF THE URINARY BLADDER

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The permanent or temporary escape of a part or the whole of the urinary bladder through any of the usual or unusual hernial orifices is uncommon. Nevertheless, many cases have been published and a much larger number have been allowed to pass without record.

Though the term hernia implies the presence of a hernial opening, of a hernial sac, sac-contents and sac-coverings, we know that in many hernias of the urinary bladder, the sac is either incomplete or totally absent.

Many operators have unknowingly punctured, incised, ligated or removed a herniated bladder-process and then closed the hernial canal and operative wound in the usual way. Bladder protrusions have been excised by mistake for hernial sacs, or stitches used to close hernial canals have been passed too deeply and found at the necropsy to have caught the bladder.

All hernias herein considered were external hernias, that is, their outermost

overlying saccular covering was skin; each after reaching a certain stage of development gave rise to a more or less visible and palpable external swelling in the obturator, femoral, inguinal or other regions, depending upon the anatomical location of the hernia. Vesical hernias are extremely rare in infancy, childhood, and adolescence. They are most frequent after the fortieth year of life. Hernias of the bladder is an infirmity occurring chiefly in advanced life.

INCIDENCE AS TO SEX

Hernias of the bladder, like all hernias of the viscera common to both sexes are found more frequently in males. Case reports show that in the female, these hernias occur in nulliparae, in primiparae, and in multiparae.

INCIDENCE AS TO SIDE INVOLVED

Most hernias of the urinary bladder are unilateral, and in the majority of cases they are on the right side. Occasionally, one meets with a bilateral vesical hernia.

ANATOMICAL TYPES

Hernias of the urinary bladder appear at various anatomical sites. Indirect or oblique inguinal hernias escape from the abdomino-pelvic cavity, above Poupart's ligament, by way of the external inguinal fossa, and follow in their progress outward the course of the spermatic cord in the male, or of the round ligament in the female. They are complete or incomplete, according as the herniated viscus or viscera emerge or not beyond the external opening of the hernial canal. The complete are pudendal or scrotal. In the former, the hernial swelling descends into the labium majus, in the latter into the scrotal pouch.

Direct inguinal hernias escape from the abdominal cavity by emerging through either the middle or the internal inguinal fossa, and first appear externally at the superficial abdominal ring. Direct inguinal hernias are always to the inner or medial side of the deep epigastric vessels, and, unlike the indirect, do not follow the entire course of the inguinal canal.

According to the relation which the bladder protrusion bears to the peritoneum, hernias of the urinary bladder are classified into the following three varieties:

(a) Intra-peritoneal, in which there is a complete hernial sac.

(b) Para-peritoneal, in which the herniated bladder-process is covered by the peritoneum on one surface.

(c) Extra-peritoneum, in which the herniated portion of the bladder is neither engaged in nor contiguous to the hernial sac.

In the intra-peritoneal variety, the herniated portion of the bladder has a complete peritoneal covering and is contained in a true hernial sac. In the para-peritoneal variety, the herniated bladder-process lies to the inner side of the sac, and its serous covering enters in part into the formation of the hernial sac. Part of the herniated bladder-process has no peritoneal covering. The para-peritoneal form is not uncommonly a sliding hernia, and is frequently due to a continuous pull and traction exerted by the sac of an existing enterocele, epiplocele ,or entero-epiplocele upon the peritoneal covering of the urinary bladder. In the extra-peritoneal variety, the herniated bladder-process has no peritoneal covering. The prolapsed bladder is neither present in nor does it enter into the formation of a hernial sac. The extra-peritoneal bladder protrusion is in relation with the subcutaneous tissues

and is always distinct from and to the inner side of the hernial sac, if one be present.

CLINICAL TYPES

Any hernia of the bladder, be it intra-peritoneal, para-peritoneal or extra-peritoneal, may be reducible, irreducible, inflamed, obstructed, or strangulated.

ETIOLOGY

The etiology of these hernias is largely the etiology of hernias in general. In the causation of this pathological lesion, the following factors are of importance:

(A) All conditions that tend to increase the intra-abdominal pressure.

1. Occupations necessitating repeated muscular efforts associated with increased intra-abdominal tension, as the lifting or pushing of heavy weights, etc. (over twenty cases in our series.)

2. Physiological and pathological states which distend the abdominal cavity, stretching the abdominal parietes, and widening the orifices, normally present in the muscular and aponeurotic layers of the abdominal wall (enteroptosis, obesity, abdominal tumors, ascites, pregnancy, etc.)

3. All diseases associated with frequently repeated increase of intra-abdominal pressure (long-standing lung affection, pulmonary emphysema, chronic bronchitis, habitual constipation, etc.)

(B) All conditions which weaken the abdominal wall.

1. Acute or chronic diseases debilitating the organism, especially such as cause great emaciation.

2. Obesity weakens the abdominal wall and increases the intra-abdominal pressure.

3. Traumatism. (Abdominal operations, etc.) Most often the traumatism does not cause the hernia, but only reveals its existence. Pathologic adhesions of viscera or omentum to the anterior parietal peritoneal wall near a hernia opening may act as a predisposing cause.

4. Previous hernia operations.

5. Enteroceles, epiploceles and entero-epiploceles.

6. Feeble development or atrophy of the aponeurosis of the transversalis muscle and of the conjoined tendon. This factor is of great importance in direct inguinal hernia.

7. Unduly large hernial rings.

8. Excessive breadth of hernial canal.

9. Congenital defects present in abdominal wall.

10. Inherited or acquired weakness of abdominal wall.

11. Pre-existing hernial sacs of pre- or post natal formation.

(C) All conditions associated with prolonged over-distention, over-stretching, impaired contractility, restricted mobility, etc., of the urinary bladder.

1. Congenital malformations of the bladder.

2. Diseases of the lower urinary organs, impairing the expulsive force of the bladder or abnormally hindering the outflow of urine (vesical catarrh, prostatic hypertrophy, urethral stricture, phimosis, etc.)

3. Abnormal increase of the peri-vesical fatty connective tissue (lipome pre-vesical.)

SYMPTOMATOLOGY

Bladder hernias vary in size. The hernial swelling may be cylindrical, ovoid, elongated-ovoid; it may be grooved or bi-lobed, soft, elastic and fluctuating or hard and non-elastic. The hernial swelling may be a large, tense, smooth tumor, may occupy the scrotum, may extend as far as the middle of the femur, may occupy an entire labium, thereby distorting the vaginal opening.

The volume of a bladder hernia is liable to rapid and considerable changes, being influenced by clinical type of hernia, position of body, amount of urine present in bladder, etc. The hernial swelling gives a dull or a tympanitic percussion note, etc. Pain is in inconstant symptom.

Diverse urinary disturbances (subjective and objective) may be present. These disturbances may be occasional or constant. Patient, in order to urinate, may find it necessary to elevate or to compress the scrotum and its contents, or to both elevate and compress the scrotal contents. These patients sometimes resort to unusual positions to empty their bladder; dorsal decubitus. In a few cases, on account of the narrowing or compression of the joining isthmus, considerable difficulty is experienced in emptying the scrotal or labial portion of the bladder into the pelvic portion. Vesical tenesmus, burning on urination, frequent and difficult micturition, increase of swelling with accumulation of urine, decrease with voiding, two-step urination (miction a deux temps) associated with a simultaneous lessening of the hernial swelling; all of these symptoms are highly suggestive.

The injection of fluid into the bladder causes an increase in size of the hernial swelling. A sound introduced into the bladder may enter the herniated bladder-process. A cystoscope introduced into the bladder may show the round contour of the normal bladder distorted into T-shape, may show vesical opening of the herniated bladder-process, etc.

PATHOLOGY

The spermatic cord may be to the outer side of the hernial swelling, may be spread out over the hernial sac, may be behind sac, may be below and external to sac, may be spread out over bladder (anterior and outer surface.)

Acquired hernial sacs, except in hernias, "par glissement," are always entirely derived from the parietal peritoneum.

Sac may be thin or thick, congested or infiltrated, intimately adherent to the spermatic cord, and not uncommonly, is capped by a thick mass of fatty tissue. An extra-peritoneal bladder hernia has no serous hernial sac.

There may be an unusual amount of fat in the hernial canal. In the extra- and para-peritoneal forms, the herniated bladder-process is frequently covered with fatty tissue, the "lipome herniaure" of the French authors. This pre-vesical accumulation of fatty tissue is thought by many to be an important contributory etiological factor.

In the para-peritoneal hernias, the serous sac is, at one point, intimately adherent to the bladder-wall. In the para- and also in the extra-peritoneal types, if the sac be present, the bladder is always to its inner, to its medial side, and, at times, below. The bladder may be adherent to the hernial sac, may be adherent to the spermatic cord.

Amount of viscus present in hernial swelling may be small, may be large. In some cases the hernial swelling consists solely of the herniated bladder-process and of the increased amount of fatty tissue overlying it; in other cases, the hernial swelling consists of a serous hernial sac and of the herniated bladder-process or bladder-diverticulum. In a large number of cases, the hernial swelling includes a herniated bladder-process and a distinct or contiguous serous hernial sac with or without sac contents. The other hernial sac-contents may be

hernial fluid, a part of ureter, omentum, small intestine, large intestine and omentum, small and large intestine.

In the strangulated cases, we note such contents as the following: Hemorrhagic fluid and the bladder; bloody fluid; gut and ovary; a loop of congested intestine and urinary bladder; congested bluish appendix epiploicae; reddish-brown fluid, bladder-diverticulum and small intestine.

The wall of the herniated bladder-process may be normal, thinned or thickened. The herniated bladder-process may present the appearance of an empty or of a thickened hernial sac. Its cavity communicates with the cavity of the non-herniated portion of the bladder by means of a wide or narrow channel. It may be the seat of tuberculous disease. Calculi may be present in the herniated, in the non-herniated, or in both portions of the bladder.

The spermatic cord is sometimes found spread out over the vesical hernia, at times it is distinct from it, and often it is in close relation with a co-existing enterocele, epiplocele, or entero-epiplocele.

DIAGNOSIS AND DIFFERENTIAL DIAGNOSIS

Before operation, the following symptoms are suggestive of vesical hernias:

1. Urinary disturbances; dysuria, two-stage urination, frequent urination, scalding urination.

2. A hernial swelling, pressure upon which causes a desire to urinate, and which increases in volume with urinary retention, and markedly diminishes in size with urination.

3. A hernial swelling, the size of which is increased by air—or water—distention of the urinary bladder.

4. A hernial swelling in which fluctuation is detected or in which a metallic sound can be introduced by way of the urethra.

5. A hernial swelling in which, after easy reduction of most of the contents, there persists a small doughy mass representing the extruded part of the bladder.

During the course of a hernia operation, the following symptoms or signs are suggestive of vesical hernias:

1. An unusual amount of fat in the neighborhood of a hernial swelling.

2. Difficulty in finding or in isolating the true hernial sac from the inner mass.

3. Trabeculated appearance of the bladder muscularis.

4. Large-sized external hernial opening and the fact that hernias of the bladder are usually nearer the median line than true hernial sacs.

5. The occurrence of a second hernial sac is so rare that it is a safe rule to proved otherwise, any structure resembling a second hernial sac.

6. The pedicle of a herniated bladder-process leads down behind the pubic bone into the true pelvis; the pedicle of a true hernial sac leads to the general peritoneal cavity.

Passage of sound into a cystocele, cystoscopic confirmation of its existence, escape of urine following wounding of bladder (thirty-one cases) all these are conclusive signs.

Keep in mind that vesical hernias are frequently associated with intestinal and omental hernias.

Injury of the bladder may not be noticed at the time of operation, and be diagnosed, for the first time, several hours after the operation by:

(a) Voluntary voiding or withdrawal by catheter of blood-stained urine.

(b) Urine escaping from the hernial operative wound. This is usually preceded by the development and subsequent rupture or incision of a urinary phlegmon.

(c) Sepsis due to urinary extravasation.

(d) Peritonitis due to escape of urine into the peritoneal cavity.

TREATMENT

In discussing the treatment, we will limit ourselves to the consideration of femoral and inguinal hernias.

The operator, not on his guard, may incise the bladder under the belief that he is opening a hernial sac. In operating on recurrent hernias, guard against wounding the bladder. If isolation of the hernial sac from the inner lower portion of the ring be difficult, involvement of the bladder is to be suspected. Avoid this injury by securing a good exposure of the operative field. The more exact the stripping of the sac, quite up to the deep epigastric artery, the more likely will a cystocele, especially in its earlier stages be discovered.

Vesical hernias can be produced by traction upon the sac and efforts to place the ligature high up may, if one be careless, result in catching in its bite the bladder-wall.

The bladder was accidentally injured in sixty-eight of the cases under consideration. In thirty-one, urine escaped into the operative field at time of operation.

Should the bladder be incised or otherwise injured, carefully suture it and provide appropriate drainage. Immediate closure of the bladder wound is of primary importance. It is effected by two, in some cases, by three layers of interrupted or continuous sutures. Introduce your bladder sutures so as to include all the layers of the bladder-wall, the mucosa excepted. Needless to say that only absorbable suture-material is to be employed. Even if the bladder be not opened, but merely injured, it is safer to fortify the weak spot by the introduction of a few catgut sutures.

Resection of the herniated bladder-process is indicated only if it be very much attenuated, necrotic or the seat of other serious degenerative changes. Resection is to be followed by suture of the bladder-wound. If a calculus or calculi be present in the bladder protrusion, incise the bladder-wall, remove the foreign body, and repair the vesical wound secundum artem. As a routine procedure, resection of the bladder protrusion is to be recommended.

If the bladder protrusion be apparently normal, free it from surrounding adhesions, if any be present, and then reduce it into the abdomino-pelvic cavity. As a routine procedure, bladder repair, bladder resection and bladder reduction are always to be supplemented by refection of the abdominal wall. After isolation of the herniated bladder-process, supplemented by the repair of any injury which it may have sustained during the course of operative procedure, we advise that the bladder be reduced into the abdominal cavity.

Vesical hernias have been successfully operated for radical cure without anaesthesia, under local (cocaine infiltration), spinal and general surgical anaesthesia; nitros oxide gas and oxygen, chloroform, and ether (the majority of cases.)

For inguinal hernias, the Bassini operation, with or without transplantation of the cord seems to be the operation most universally employed. Operators are not agreed as to the advisability of using a permanent catheter after bladder suture nor as to the time during

which this permanent catheter, if used, should be left in the bladder. Some leave it one day, others as long as two weeks. Drainage extending to the bladder wound is a prudent provision against leakage from the sutured bladder.

If the hernial swelling contains, in addition to a bladder-process a knuckle of gut, a piece of omentum or some other viscus, the indication is to first free and reduce the bladder-process and then carefully isolate, reduce or resect, if indicated, the other hernial contents. In the absence of contra-indications, all hernial sac-contents, sac-fluid excepted, are to be returned into the cavity from which they have escaped.

The treatment of the sac-contents does not differ from that which obtains in hernial swellings in which no bladder process is present; if these contents are injured by the surgeon, the injury calls for repair.

RESULTS

Operations for the radical cure of vesical hernias have practically no mortality. What mortality occurs is due to concomitant circumstances; extreme old age, great debility, shock, long-standing strangulation and unrecognized bladder injuries.

Operations for the radical cure of vesical hernias are rarely followed by disagreeable sequelae.

Announcements and Communications

March 19, 1921.

Dr. James R. Bloss,
Huntington, W. Va.

My Dear Bloss:

I was awfully glad to get your letter the other day; and with you, I am rejoicing that the meeting is to be in Charleston. We are going to take care of the crowd right. Our reception committee will meet all trains and let you fellows know what a real Charleston welcome is. We will have something for the women too.

We have seen the hotels, and I am enclosing their rates. Will you please publish these, and ask the fellows to make their reservations early so as to be sure of their accommodations. This town is full all the time, and they had better do this. The banquet will be on Wednesday night so that everyone will have an opportunity to be there. We are not waiting until half of them go home. We want them all to break bread with us.

Very sincerely yours,

H. G. NICHOLSON.

HOTELS

All conducted on European plan.

Holley, 100 rooms; rates $1.50 to $3.00 per day. Fifty rooms reserved for the Society.

Kanawha, 165 rooms; rates $2.00 to $7.00 per day. Fifty rooms reserved for the Society.

Ruffner, 172 rooms; rates $2.00 to $5.00 per day.

Fleetwood, 132 rooms; rates $1.25 to $3.00 per day. Twenty-five rooms reserved for the Society.

Peyton, 50 rooms; rates $1.50 to $2.50 per day.

Lincoln, 55 rooms; rates $1.50 to $4.00 per day.

Jefferson, 56 rooms; rates $1.00 to $2.50 per day.

Elk, 76 rooms; rates $1.00 to $3.00 per day. Twenty reserved for the Association.

Washington, 35 rooms; rates $1.00 to $2.00 per day. Ten reservations for the Society.

The Y. W. C. A. serves excellent dinners at noon at a very reasonable price.

The West Virginia Medical Journal

JAS. R. BLOSS, M. D., Editor
C. R. ENSLOW, M. D.
J. E. RADER, M. D. Assistant Editors

Huntington, W. Va., April, 1921

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All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: 804 Lincoln Place, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

OFFICERS OF THE STATE ASSOCIATION

PRESIDENT—J. Howard Anderson, Marytown.

FIRST VICE-PRESIDENT—H. E. Gaynor, Parkersburg.

SECOND VICE-PRESIDENT—S. G. Moore, Elkins.

THIRD VICE-PRESIDENT — Charles O'Grady, Charleston.

SECRETARY—Robert A. Ashworth, Moundsville.

TREASURER—Hugh G. Nicholson, Charleston.

DELEGATE TO A. M. A. 1920-1921—H. P. Linz, Wheeling; Alternate, J. E. Cannaday, Charleston.

DELEGATE TO A. M. A. 1921-1922—Jas. R. Bloss, Huntington; Alternate, W. W. Golden, Elkins.

COUNCIL

FIRST DISTRICT—C. G. Morgan, Moundsville, one-year term; H. P. Linz, Wheeling, two-year term.

SECOND DISTRICT—J. C. Irons, Dartmoor, one-year term; C. H. Maxwell, Morgantown, two-year term.

THIRD DISTRICT—C. R. Ogden, Clarksburg, one-year term; L. H. Forman, Buckhannon, two-year term.

FOURTH DISTRICT—G. D. Jeffers, Parkersburg, one-year term; W. S. Link, Parkersburg, two-year term.

FIFTH DISTRICT—J. E. McDonald, Logan, one-year term; E. H. Thompson, Bluefield, two-year term.

SIXTH DISTRICT—R. H. Dunn, Charleston, one-year term; J. W. Moore, Charleston, two-year term.

DR. WALTER S. LINK

Again it becomes necessary for me to announce to our membership that another of our brothers has been called from our midst. Again it is that a member of the Council has been taken.

Those of us who have been attending the State meetings for a number of years had come to know and love Dr. Link for his genial kindliness and good fellowship as well as to admire him for his professional attainments.

He was born in Jefferson County, West Virginia, July 13, 1870, and received his education at the University of West Virginia, later studying medicine at the Baltimore Medical College; after this he spent three years at the Eye and Ear Infirmary in New York.

In 1898 he located in Parkersburg and specialized in Eye, Ear, Nose and Throat. His success in his special field was marked and he ranked with the leaders of this line in our state.

In December, 1917, he enlisted in the Medical Corps of the army and was commissioned captain. He served for two

years, the greater portion of which time he was stationed at Fort McDowell, California.

His death occurred, after a very brave fight of seven weeks, from paralysis.

He is survived by his wife and daughter. To them we extend our most sincere sympathy in their hour of sadness.

This kindly fellow member will be missed at the meeting in May. His wise counsel will be lacking in the deliberations of the Council.

PAY YOUR DUES

CHARLESTON MAY 24-25-26

Owing to a lack of facilities for the entertainment of the Association at Pence Springs, the Council, after carefully considering the matter, decided to change the place of meeting to Charleston.

This is, we feel very sure, a wise change of plans for we are thus assured of ample accommodations and knowing our fellow members of the Capital as we do there is not the slightest question but that we shall receive a hearty welcome and be royally entertained.

A list of the hotels together with the number of available rooms and the rates is published in a communication from Dr. Nicholson on another page of this issue. He insists that the members intending to attend write at once to engage accommodations, as they expect a banner attendance.

In this connection I am requested by the Secretary of the Kanawha County Medical Society to publish the following NOTICE.

Read it, think back some ten or eleven years, read it again and you will decide that you will investigate this matter for some three days of the last week in May to see if results justify Dr. Henson's wonderful publicity.

Seriously—make your reservation at once and be sure to come.

PILL PEDDLERS, TAKE NOTICE

Your brothers in Charleston are RAISING AN ENORMOUS SUM OF MONEY to use when the State meeting is held there in May. The entertainment committee will be DRUNK—with money, and will be anxious to spend it on you and your wives. They are making elaborate plans for a good time.

The State Secretary is arranging an instructive program of scientific matter while the "Docs" of Charleston are thinking only of the social side. The scientific side don't worry Schoolfield, Churchman, MacQueen, Haley, Nicholson, Young, Shawkey and Moore, but if you don't have a good time, between drinks at the fountain of knowledge, then the bunch will worry. Come to Charleston the last week in May.

PAY YOUR DUES

PAY YOUR DUES

Now docs not this heavy black faced type screaming out your delinquincy at you, look ridiculous (or should I say scandalous?) disfiguring the editorial pages of a perfectly good, staid, dignified Medical Journal?

Frankly, it looks like the very devil but something out of the ordinary has to be said or done or printed to awaken a lot of fellows to the fact that they have not paid their dues yet. Maybe all will sit down and settle this little matter with their local Secretary at once so

that we may erase these horribly defacing words from our editorial page next month.

I was requested to do something to call the members' attention to their forgetfulness. Have I?

PAY YOUR DUES

The following is an editorial appearing in the Missouri Medical Journal for February, 1921. It puts so clearly into words some thoughts which we have had on this same subject for some time that the liberty has been taken to reprint it in our Journal. Be sure to read it for there is a world of wisdom contained in this editorial in our sister State Journal.

"DOCTORS AND SPECIALISTS

"There is no denying the present day tendency of the embryonic M.D. to delve into some specialty of medical science soon after graduation; in fact, it is becoming quite the vogue, and since many discrepancies are arising concomitantly with this fashion it behooves us to take a glance at the situation and determine if possible whether this custom in modern medicine is not assuming the proportions of other illogical outcroppings which, when once fairly established, sail along with an impetus that habit and tradition alone can impart. American psychology has proven a very startling process of reasoning for the European brain to analyze, therefore our attention is arrested now and then by the comment of some noted European physician who expresses his wonderment at the reckless and haphazard manner in which "specialists" are turned out in America. We recall that in our own country there were registered occasional feeble protests against the "six weeks' specialist," but even these have ceased to be voiced.

"Surely we are losing sight of the salient function which medicine as a profession is called upon to perform by virtue of its peculiar relation to mankind when we tolerate without substantial protest this increasing tendency on the part of the graduate in medicine. We suspect that the medical school of today with its arbitrary curriculum is responsible in some measure for this mania, for the courses are so arranged that after the student reaches the end of the fourth year he is filled with despair as to the possibility of mastering the essentials of all the studies that have been presented to him often in a cumbersome manner and laden by the scholastic phantom of research. The most logical procedure then—and the bewildered graduate imagines it to be the most plausible, albeit not the most heroic—is to escape the chaotic responsibility of practicing general medicine, and therefore the impetuous rush into a specialty.

"Medicine must ever hold before its disciples the pragmatic end results and benefits which should logically accrue to the community — in this instance, the patients. This assumption should obtain precedence over all other considerations which concern the physician personally or the profession as a whole. As we apprehend the situation, the European physician—notably of England—is imbued first of all with the paramount necessity of acquiring first and above all other considerations a fundamental and substantial knowledge of general medicine. There are many physicians in France, Germany and England who are consulted mainly for some particular phase of medicine, and who could by all processes of reasoning be justly termed specialists, yet we venture to suggest that it would prove to be the exception rather

than the rule to find many physicians in those countries who would dub themselves with the much desired American cognomen of specialist.

"The fact has evidently not been lost sight of in Europe that the primary requisite of any medical man is to become a doctor in the broadest sense of all that the term implies. Yes! a doctor first and then if it is unavoidable a specialist, but under no circumstances should the conditions be reversed. It is difficult to surmise how any medical man can ever hope to become a competent diagnostician as a specialist unless he possesses a sound knowledge of general medicine. The mal results of such misconception are too evident to need pointing out, and the errors which are constantly being made by the narrowed and 'one-eyed' specialist require no further comment. The graduate in medicine on leaving the medical school or hospital has already obtained a glimmering of the seething economic cauldron awaiting him on the outside, and he has absorbed the wild rumors of the 'princely fees' which are received by specialists; his decision is soon made, and presto! he is a specialist, or at least firmly imbued with that assumption.

"Were we commenting upon the dearth of physicians in the country districts we should point out that the underlying incentive for this exodus from the country was due to the lure of the possibilities presumably present in the path of the city specialist. Too often this potentiality eventuates as a mere mirage and when the illusions have been dispelled the sensible physician will return to the surer conditions in the rural communities."—Missouri Medical Journal.

PAY YOUR DUES

State News

Dr. M. R. Stone, of Parkersburg, is in New York taking an advanced course in the different methods of anesthesia.

Dr. H. P. Linsz, of Wheeling, W. Va., was a professional caller in Parkersburg recently.

Dr. J. W. Judy, of Belleville, Wood county, was at the Parkersburg City Hospital recently on professional business.

Dr. C. E. Park is in New York taking a special course in Eye, Ear, Nose and Throat, and expects to return to Parkersburg in the near future and take up his practice.

At the last meeting of the Kanawha Medical Society held Tuesday, March 15th, a gold watch was presented to Dr. S. L. Jepson, who has recently retired from active duty as State Health Commissioner, as a token of the esteem in which he is held by the local medical fraternity. The presentation address was made by Dr. F. F. Farnsworth.

The Charleston doctors' weekly Thursday luncheons at the Hotel Kanawha continue to be of much interest. From time to time various laymen are invited to discuss topics of public interest before the physicians.

Dr. Maxwell Barber, of Charleston, W. Va., has been in Boston for several months doing special hospital work. Dr. Barber expects to spend three years in the hospitals of that city before opening an office for private practice.

Dr. Montgomery W. Glass, aged 66, well known Wellsburg physician, died December 17th, after more than a year's illness. Was a graduate of Jefferson Medical College, class of 1878. He served for 18 years on the board of United States Pension Examiners of Brooke county. Was a member of Brooke County Medical Society.

There will be no change in the policies or management of the Sawyer Sanatorium at Marion, owing to the fact that Dr. C. E. Sawyer has become President Harding's personal physician. Dr. Carl W. Sawyer, who has been Chief of the Professional Department of the Sanatorium for sometime and the regular staff of assistants will continue to treat nervous and mental cases as formerly.

Drs. R. H. Dunn and W. A. McMillan, of Charleston, attended the meeting of the Gynecological Association at Chicago, in the American College Surgeons' Building in February and presented a paper on Abdominal Pregnancy in Case Having Had Previous Hysterectomy. They also attended special clinics. The doctors were accompanied by their wives.

The 77th Annual Meeting of the American Medico-Psychological Association will be held in Boston, May 31 to June 3, 1921.

Dr. Lindsey T. Vinson, of Huntington, was appointed state commissioner of health on February 28th. Dr. Vinson succeeds Dr. R. T. Davis, of Charleston, who resigned.

Miss Anna K. Trimble, of Huntington, resigned her post as superintendent of the Chesapeake & Ohio Hospital to take charge of the hospital at Williamson, operated by the Greater Huntington Hospital Association.

The following announcement has been received:

Dr. Henry Andrew Brandebury
has the honor of announcing the marriage of his daughter,
Henryetta
to
Mr. John Franklin Hager, Jr.,
on
Sunday, the twenty-seventh of February
nineteen hundred and twenty-one
Huntington, West Virginia

Separate cards were enclosed, which read:

At Home
after the first of April
Ashland, Kentucky.

CHARLESTON ITEMS

Dr. C. L. Bonifield, of Cincinnati, was a professional visitor to Charleston on Februarq 24th, and while there was a most welcome visitor to the doctor's club luncheon.

Dr. A. M. Reid is spending a few weeks in Florida to regain his health.

Dr. G. C. Schoolfield spent a few days in Cincinnati recently visiting the theatres and hospitals.

Dr. C. A. Ray has just returned from Cincinnati where he has been for a week with his son who has been suffering from middle ear trouble.

Dr. J. W. Moore was a visitor to Johns Hopkins Hospital the last week in February.

For the past year the doctors of Charleston have been meeting every Thursday at noon in the dining room of the Kanawha hotel to enjoy lunch together. These Thursday luncheons have become so popular that their permanency is assured. This is purely a social

gathering and no medical topics are allowed. Visiting doctors are always welcome.

Dr. J. H. Sutherland, of St. Albans, W. Va., was seriously injured in Charleston, March 12th, while alighting from a street car. Dr. Sutherland is sixty-eight years old and has been a life long resident of St. Albans, his father having practiced there in the early sixties.

Mme. Marie Curie, discoverer of radium and foremost woman scientist in the world, will visit the United States in May. This will be the first time she has been in the United States. Mme. Curie, who is 58, discovered radium 31 years ago. She is now teaching in the Sarbonne Institute, Paris, from which she derives her sole income. Her discovery, which has enriched many others, and has been of such great importance in saving life, has brought her little financially, she says. She admits that she doesn't own a single gram of radium.

Dr. J. W. Rifc, of Kenova, and Dr. A. P. Banfield, of Catlettsburg, Ky., have gone to New York City where they will take post-graduate courses in medicine and surgery.

Dr. S. R. Holroyd, superintendent of the Second Hospital for the Insane at Spencer, attended the funeral of Dr. Link, at Parkersburg.

Dr. John N. Simpson, Dean of the Medical College, Morgantown, was a recent visitor in Huntington, enroute home from the Annual Conference on Medical Education and Hospitals, License and Public Health.

Dr. L. V. Guthrie, superintendent of the Huntington State Hospital, and Mrs. Guthrie, who have been in Florida for their annual vacation, have returned home.

THE BOSTON SESSION

Special Railroad Fares

The Trunk Line Association acts for the railroads within the following territory:

New York State (east of and including Buffalo, Niagara Falls, Suspension Bridge and Salamanca), New Jersey, Pennsylvania (east of and including Erie, Oil City and Pittsburgh), Delaware, Maryland, District of Columbia, Virginia anad West Virginia (east of and including Wheeling, Parkersburg, Kenova, Orange and Norfolk).

This association has just announced that there will be available for members of the American Medical Association who go to Boston for the annual session a special rate for the round trip, going and returning by the same route, of one and one-half fares to the western gateway of New England Passenger Association territory, plus double the regular one way fare from this gateway to Boston. In order to secure this rate, the purchaser is required to present an identification certificate. One certificate will enable the member to purchase tickets for himself and for dependent members of his family. These identification certificates may be secured by writing to the Secretary of the Association, Dr. Alexander R. Craig, 535 North Dearborn Street, Chicago, and enclosing a self-addressed, stamped envelope. They will not be available for two or three weeks, so that requests received in the interim will not be acknowledged but will be filed and will be given attention as soon as the certificates are available.

Tickets will be sold on presentation of these certificates from June 4 to 6,

and will be validated at Boston during the days of the session. When validated, these tickets will be good for return, leaving Boston on the date of validation, and the passengers must reach original starting point within the limit shown on tickets but in no case later than midnight, June 13.

As soon as advices are received from the chairmen of other passenger associations regarding the action which may be taken up by their lines, the American Medical Association will be informed and prompt announcement will be made through The Journal.

Dr. E. E. Walker, after practicing for a number of years in Appomattox County, Virginia, has located at Algoma, W. Va.

Dr. S. L. Jepson is leaving Charleston this month for his old home in Wheeling. He is one of the founders of the State Medical Association, and one of the oldest members living today.

INTERDEPARTMENTAL SOCIAL HYGIENE BOARD

The Senate voted to strike out an item of $40,000 for administration of the Interdepartmental Social Hygiene Board which had been inserted in the Sundry Civil Bill as an amendment by the Senate Appropriation Committee. The appropriation of $300,000 for the continuance of the venereal disease control work was transferred from the Interdepartmental Social Hygiene Board to the division of venereal diseases of the Public Health Service. If this action is approved by the conference committee the activities of the Interdepartmental Social Hygiene Board will cease after July 1 and all venereal disease control work of the federal government will be concentrated under the Public Health Service.

The following men are associated together with offices at the Guthrie Hospital in Huntington: Dr. J. A. Guthrie, Surgery and Consultation; Dr. J. S. Klumpp, Anesthesia and Laboratory Work; Dr. H. V. Lusher, Roentgenology and Diagnosis.

The following West Virginia doctors attended the American Congress on Internal Medicine in Baltimore: S. L. Cherry, Clarksburg; Walter E. Vest, Huntington; Chas. W. Waddell, Fairmont; James E. Wilson, Clarksburg.

Dr. Wm. A. Thornhill, of Charleston, has gone to Rochester, Minn., to take some special work in the use of Radium at the Mayo Clinic.

At the convention of the American College of Physicians held in Baltimore February 25th, the following officers were elected:

President—Dr. James M. Anders, Philadelphia, Pa., Professor of Clinical Medicine, Graduate School, University of Pennsylvania.

Vice-President — Dr. Frederick Tice, Chicago, Illinois, Professor of Medicine, University of Illinois.

Second Vice-President — Dr. C. C. Bass, New Orleans, La., Professor of Research Medicine, Tulane University.

Secretary - General — Dr. Frank Smithies, Chicago, Illinois, Associate Professor of Medicine, University of Illinois.

Associate Secretary-General—Dr. Joseph H. Byrne, New York City, N. Y.

Treasurer — Dr. Clement R. Jones, Pittsburgh, Pa., Lecturer in Medicine, University of Pittsburgh.

At the recent meeting of the American Congress on Internal Medicine held in Baltimore the last week of February, the following officers were elected:

President—Dr. Sydney R. Miller, Baltimore, Md.

Vice-President — Dr. Ellsworth S. Smith, St. Louis, Mo., Professor of Medicine, Washington University.

Second Vice-President — Dr. James Rae Arneill, Denver, Colo., Professor of Clinical Medicine, University of Colorado.

Secretary - General — Dr. Frank Smithies, Chicago, Illinois, Associate Professor of Medicine, University of Illinois.

Treasurer — Dr. Clement R. Jones, Pittsburgh, Pa., Lecturer in Medicine, University of Pittsburgh.

THE BILL AS ITEMIZED

Not long ago those in charge of an old church in Belgium decided to repair its properties and employed an artist to touch up a large painting. Upon presenting the bill, the committee in charge refused payment unless the details were specified, whereupon he presented the items as follows:

To correcting the Ten Commandments, $5.12.

Embellishing Pontius and putting new strings on his bonnet, $3.20.

Putting new tail on rooster of St. Peter and mending his comb, $2.20.

Repluming and guilding the left wing of the Guardian Angel, $5.18.

Washing the servant of the High Priest and putting carmine on his cheeks, $5.02.

Renewing Heaven and adjusting the stars and cleaning the moon, $7.14.

Touching up Purgatory and restoring the lost souls, $3.06.

Brightening up the flames of Hell and putting a new tail on the Devil and mending his left hoof and doing odd jobs for the damned, $7.14.

Rebordering the robes of Herod and adjusting his wig, $4.00.

Take the spots off the Son of Tobias, $1.30.

Putting a new stone in David's sling, enlarging the head of Goliath and extending Saul's legs, $6.13.

Decorating Noah's Ark and putting a head on Shem, $3.13.

Mending the shirt of the Prodigal Son and cleaning his ear, $2.36.

(Better when read aloud.)

—*Wisconsin Medical Journal.*

Society Proceedings

Huntington, W. Va.,
March 10, 1921.

The President called the meeting to order at 8:30 p. m., in the parlor of the Frederick Hotel. The Secretary read the minutes of the previous meeting, which were approved as they stood.

Dr. Baker presented a very interesting clinical case, one of a young child with the oval opening through the scrotum, and a large meningocele.

Dr. Rader presented another very unusual case, a married woman having an infantile vagina and uterus, which were not connected.

Dr. Strange presented a paper, "Notes on Fractures," which contained many valuable points. Discussion opened by Dr. J. Ross Hunter, followed by Dr. Cronin.

Dr. Vest, chairman of the committee to communicate with the nurses regarding a central nurses' register, reports that they as a whole are favorable to it.

He moved that Mr. Ivan Davis be thanked for his willingness to aid in establishing such a bureau. The chairman continued this committee and its activities.

Number present 30.

Dr. Gerlach's committee was not yet ready to report.

A letter from the A. M. A. was read regarding Chiropractors.

Dr. Strange moved that the Society go on record as unalterably opposed to the bill about to be presented to license Chiropractors. Dr. Hunter amended that a copy be presented to committee in the Loop Building.

Dr. Simpson, Dean of the U. of W. Va. Medical Department, gave a talk regarding the proposed Medical School.

A request for the transfer of membership of Dr. Gobler was brought up and referred to Board of Censors.

Adjourned.

F. C. HODGES,
Secretary.

The meeting of the Kanawha County Medical Society was called to order by the President, J. E. Cannaday, on Tuesday evening, February 15th, and a very interesting program was begun.

Dr. R. D. Roller, Jr., read a paper on the Diseases of the Red Blood Cells, which was discussed by Dr. H. L. Robertson. Dr. B. H. Swint discussed the indications for transfusion of blood and methods of blood typing.

The following doctors were elected to membership: Dr. O. H. Bobbit, Charleston; Dr. J. H. McCulloch, Charleston; Dr. Thomas A. Lamb, Nitro, W. Va., and Dr. Owen Poling, Brush Creek.

A letter from the Sisters of Saint Francis expressing their regrets at leaving the city was read by the President.

Dr. Churchman moved that the State Society be invited to meet in Charleston the last week in May. The motion seconded by Dr. Shawkey. Motion carried unanimously.

E. BENNETTE HENSON,
Secretary.

Parkersburg, W. Va.,
March 9th, 1921.

Dr. Jas. R. Bloss:

Dear Doctor Bloss:

Following is the report of the meetings of the Little Kanawha and Ohio Valley Medical Society held on March 3rd, and a special meeting held on March 8th, to take action on Dr. Link's death.

Dr. S. M. Prunty acted as chairman in the absence of the President.

Dr. Jeffers reported that the place for holding the State Medical Meeting had been changed from Pence Springs to Charleston, which met with the general approval of the local Society.

Our Society voted to publish Dr. Farnsworth's article on Chiropractors in our Sunday morning paper with Dr. Farnsworth's permission. Dr. Farnsworth's consent was easily obtained and we published his article in our Sunday morning paper, and to say the least we certainly did get a rise out of the Chiropractors. Our Society believes that educating the public is the best way to eliminate the Chiropractors, and in this way will be able to get a jury to convict them.

Dr. E. H. Douglass, of Petroleum, Ritchie County, one of our members, was present and reported three cases of Lethargic Encephalitis that had been under his care. Two of the cases he had treated a few years ago. One of the patients died and the other got well. The other case is a recent case and is improving at this time. This subject was discussed by the various members pres-

ent and proved to be a very interesting subject as a few cases are being reported over the country at this time.

W. B. RICHARDSON,
Secretary.

—

Parkersburg, W. Va.,
March 9th, 1921.

Report of meeting of March 8th, to take action in regards to the death of Dr. Walter S. Link, one of our members of the Little Kanawha and Ohio Valley Medical Society. The meeting was called to order by Dr. G. D. Jeffers in the absence of the President and in a few words Dr. Jeffers explained the purpose of the meeting, which was to take some action in regards to the death of Dr. Link.

Dr. A. N. Frame made a motion which was properly seconded that the chair appoint a committee to draw up resolutions in regards to Dr. Link's death and that the resolutions be spread upon the minutes of this Society, published in the local papers, a copy sent to the State Medical Journal and a copy to the bereaved family.

The Society voted to send flowers to Dr. Link's funeral to signify the honor and respect he was held in by this Society.

It was also voted that the members of this Society attend Dr. Link's funeral in a body.

Following is a copy of the resolutions adopted by this Society on the death of Dr. Walter S. Link:

Whereas, the Great and Supreme Ruler of the Universe, has in His infinite wisdom removed from among us one of our worthy and esteemed fellow laborers, Dr. Walter S. Link, and whereas the long and intimate relations held with him in the faithful discharge of his duties in this Society makes it eminently befitting that we record our appreciation of him.

Therefore, Be it Resolved, That the wisdom and ability which he has exercised in the aid of our organization by service, contribution and counsel will be given grateful remembrance.

Resolved, That the sudden removal of such a life among us leaves a vacancy and a shadow that will be deeply realized by all the members and friends of this organization and will prove a serious loss to the community and public.

Resolved, That with deep sympathy with the bereaved relatives of the deceased, we express our hope, that even so grat a loss to us all, may be overruled for good by Him who doeth all things well.

Resolved, That a copy of these resolutions be spread upon the minutes of this Society, printed in the local papers, a copy sent to the State Medical Journal, and a copy to the bereaved family.

DR. CAMPBELL,
DR. WISE,
DR. STONE,
Committee.

Bluefield, West Virginia,
February 24, 1921.

The Mercer County Medical Society met in the Chamber of Commerce room, with President Slusher in the chair.

The minutes of the previous meeting were approved as read by the Secretary.

Under the head of clinical cases, Dr. T. E. Vass reported an interesting, as well as instructive case on metastases covering almost the entire body, followed by metastatic abscesses on many portions of the anatomy of this person; resulting in a fistula from the pharnx to the exterior of the neck, severe pyemia and finally death.

Under remarks on this case Dr. Rogers suggested that autogenous vaccine might have been used to an advantage.

Dr. A. H. Hoge reported a patient more or less unconscious, in a severe stupor with some symptoms of sleeping sickness, but no diagnosis was made. Dr. C. T. St. Clair suggested it might be a case of bromism, while it had no ocular movements.

Drs. Bird and Horton mentioned that they had seen a similar case without making a positive diagnosis.

Dr. J. B. Kirk reported a case of melanotic carcinoma.

The paper on "Radium in the Control of Uterine Hemorrhage," by Drs. J. F. Fox and R. O. Rogers was well gotten up and enlightened us much on this subject. This was discussed by Drs. Kirk, Vass and Fox, and closed by Dr. Rogers.

The auditing committee made its report through Dr. Vass, showing a balance of money in bank to the amount of $145.21, which was accepted and the committee discharged.

The chiropractors' committee not having anything to report, the committee, composed of Drs. Hare, Kirk, Vass and Steele, was continued.

The application of Dr. Henry C. Warlick, of Bluefield, W. Va., was received and referred to the board of censors.

The board of censors was instructed, at the suggestion of Dr. Hoge, by the President, to draw up suitable resolutions making it compulsory for any physician or surgeon before being eligible to be elected to honorary membership of this Society, they must first have been a member of the Mercer County Medical Society or be a man of some note, or have read a paper or delivered a lecture of some worth, at a meeting or gathering of the Mercer County Medical Society, and to withdraw all the names on the present honorary roll.

The following bills were allowed and ordered paid:

The Foland Printing company: July 17, 1920, 100 folders and envelopes for Mercer Healing Springs, $5.25; Sept. 18, 1920, 125 folders and envelopes for Bluefield Country Club, $7.00; Feb. 21, 1921, 500 envelopes $4.25, 75 folders for February meeting, $9.75; total $26.25.

Twenty members and Dr. Henry Frazier, of Graham, Virginia, were present.

Collection of dues from seventeen members amounted to $102.00.

March program at Bluefield, W. Va.: Dr. W. H. St. Clair, Dr. G. L. Todd, Dr. C. M. Scott, Dr. J. B. Kirk, subject Cancer; Dr. W. H. Wallingford, subject Caesarean Section with report of cases.

April program at Princeton, W. Va.: Dr. E. W. Horton, Dr. A. H. Hoge, Dr. J. R. Vermillion, Dr. J. H. Bird.

May program: Dr. E. F. Peters, Dr. B. S. Clements, Dr. R. O. Rogers, Dr. O. S. Hare.

No further business, the Society adjourned.

H. G. STEELE,
Secretary.

Medicine

ABSTRACTS

Annales de 'IInstitu Pasteur, Paris. Experimental Study of the Encephalitis called Lethargic. By C. Levaditi and P. Harvier. The general conclusions of this excellent and exhaustive study are as follows:

I. The virus for encephalitis lethargica is pathogenic for the rabbit and the guinea pig but little or not at all for the monkey.

II. The lesions which it causes in susceptible animals just as the symptoms in the experimental disease, are almost the same as in man.

III. The cause of the disease is a filterable virus, which can be preserved in glycerine, is destroyed by heating at 56 degrees c., is killed by prolonged contact with 1 per cent phenol, and retains its virulence during at least forty-eight hours after the death of the animal.

IV. The disease can be transmitted to the rabbit by the intracranial route, ocular injections and by the peripheral nerve route. The virus is harmless if injected subcutaneously, intravenously, intraperitoneally, intratracheally, in the digestive apparatus, or in the parenchyma of the salivary glands. It causes encephalitis when injected into the testicle, where it remains at least seventeen days.

V. The intact nasal mucosa opposes its entrance into the organism. The virus does not succeed in getting beyond unless the mucosa is already injured or inflammed. It follows then, very probably, the ascending tracts of the olfactory nerves to reach the brain, just as it travels in the opposite direction through the length of the optic nerve to infect the retina.

VI. The germ is found in the cerebral tissue and in the spinal cord; but is not in the humors (blood, cerebro-spinal fluid), and the organs, including the salivary glands. It is eliminated by the naso-pharyngeal secretions, favored by an inflammation of this mucosa, and following the descending tract of the olfactory nerve.

VII. Epidemics of the disease are spread by the naso pharyngeal route. The developed cases and very probably the carriers of the germ also, are the chief means by which it is spread.

VIII. There is no spontaneous recovery in the experimental cases, consequently no refractory state follows. An immunity can be created artificially by means of either living or dead vaccines. It is not absolute, but marked enough for study.

IX. The serum of vaccinated animals is not endowed with germicidal properties in vitro, nor with properties of prevention of the disease.

X. It is the same with serum from convalescent encephalitis patients, unless the convalescence be very prolonged.

XI. The pathologic histology and experimentation demonstrate the difference between the virus of encephalitis and of poliomyelitis. There is no cross immunity between the two affections.

XII. Certain acute febrile choreas, observed during a recent epidemic of encephalitis, are due to the virus of Von Economo's disease (encephalitis).

XIII. There are attenuated varieties of the virus.

XIV. The virus can be maintained living during a long time in symbiosis with cellular elements cultivated in vitro.

F. C. HODGES.

MENTHOL AND PEPPERMINT IN ACUTE CATARRHAL CONDITIONS OF THE RESPIRATORY TRACT

Hugh McGuigan, Ph. D., M. D., of Chicago: The explanation of the action of menthol and peppermint in common colds is unsatisfactory and apparently avoided. Most books on pharmacology and therapeutics simply state that these

drugs are used in various neuralgias, in sciatica, pleurodynia and toothache, locally against headache, itching, etc., and omit their more common use. By far the greatest use is in colds, and especially those in which mucous exudation blocks the respiratory passages. The relief in many of these cases, so remarkable and so well known to the laity, accounts for the numerous brands of menthol cough lozenges on the market.

The pathology of the catarrhal conditions in which these drugs are used is well known. During some stage of the condition there is an increase of relatively thick mucous material poured into the respiratory passages, and the walls of the passages are swollen and tend to adhere, thus preventing the entrance of air. Relief can be gained only in two ways: either by removing the material or by changing its form so as to allow air to enter. When menthol is used the offending material is often not expelled, so that its physical state must be changed. One knows from experience that menthol apparently opens respiratory passages and that one can breathe through passages which before were occluded. Since it is not an astringent, the most obvious explanation is that much of the mucous material is in a foamlike consistency. One view or theory of the physical structure of protoplasm is that it is a foam (Butchli, 1898) and this alveolar or foamlike structure may also be demonstrated in exudates such as mucus. It is also known to physiologists that if a normal lung collapses there is considerable tendency for the walls of the alveoli to adhere; so much so, that if a sufficiently high pressure to tear them apart is applied too quickly, there is great danger of rupturing the walls. This is why in surgery of the chest, when the chest wall is opened, a continuous insufflation of the lung is advised. These facts all sustain the view that the effect of menthol may be due to a change in surface viscosity.

To test the effect of menthol or oil of peppermint on surface viscosity, with a suction filter pump I drew a current of air through solutions of soap, blood, saliva and saponin. Each of these, especially the soap, saponin and blood, foam readily. The merest trace of menthol or spirit of peppermint added to these solutions rapidly destroys the foam. Crystals of menthol may be added of these excessive conditions apparently without much effect. The foam in such conditions is so strong that it readily supports the crystals, and to be effective the drug must be in solution or in a condition in which volatility can act. Menthol, however, dissolved in saliva has a noticeable effect, and in alcohol the effect is still stronger, because of greater solubility. In another experiment in which we had a tracheal cannula in a dog anesthetized with ether through the trachea, marked tracheal rales developed. Rales develop frequently in such cases. A few drops of the spirit of peppermint in the trachael cannula immediately broke the foam and noticeably relieved respiration. We have therefore a reasonable basis for the statement that the efficacy of menthol and peppermint in the respiratory passages is due to changes in the surface viscosity of the mucus and on the membranes producing the exudate.

The most important investigation of menthol was that of Pellacani in 1883, and in that work he does not discuss the action of the respiratory passages. We have thought it worth while, therefore, to call attention to the surface tension and surface viscosity effect of menthol. Surface viscosity holds the foam or bubble-like structure together, while sur-

face tension tends to break them. Soapy water and saponin solutions make good bubbles because surface tension is small and surface viscosity large. Ordinary respiration in catarrhal conditions in a measure simulates the experiments in which we passed a current of air through a soapy solution, and menthol inhaled in such conditions lessens the viscosity and, by changing the surface tension, aids in breaking the foam and clearing the passage way.

An important and well established fact in viscosity is that the viscosity of a liquid is increased about 2 per cent for each degree that the temperature is lowered. This is of great importance in the treatment of all respiratory cases in which the expulsion of mucus is desired. Warm, moist, respired air will greatly aid the expulsion, while cold air, if respired, will increase the difficulty. What I have said of menthol and peppermint undoubtedly can be extended to other substances of this general class.—*Jour. A. M. A.*

YELLOW FEVER VACCINE TO MAKE TRAVELERS IMMUNE IN SOUTHERN COUNTRIES

The discovery by Dr. Hideyo Noguchi, at the Rockefeller Institute for Medical Research, of a vaccine for yellow fever, introduces a new factor in yellow fever control through the possibility of making persons immune to yellow fever by vaccination.

Heretofore, work in yellow fever control has been entirely that of prevention of infection by controlling breeding places of the mosquito which carried the yellow fever germ. The isolation of the yellow fever organism, however, has made it possible for Dr. Noguchi to develop a serum which it is believed will reduce the mortality from yellow fever and a vaccine which gives promise of protecting the nonimmunes against contracting the disease.

Already vaccination against yellow fever of people going to tropical countries is being made in New York. This work is being done at the Broad Street Hospital with vaccine furnished by the Rockefeller Institute.

The first shipment of vaccine for yellow fever from the Rockefeller Institute to tropical countries was made a year ago when three hundred bottles were sent to Mexico. Other shipments have been made since then, the latest on November 10th. All vaccine supplied to Mexico is sent to the Mexican Department of Health which arranges for its distribution.

The Central American countries are so well convinced of the efficacy of Dr. Noguchi's vaccine that they are permitting travel without quarantine detention of those who have been successfully vaccinated.—*Pa. Med. Jour.*

THE RESPONSIBILITY OF PHYSICIANS

The civil chamber of the Court of Cassation, the supreme court of France, rendered an interesting decision recently touching upon the responsibility of physicians. A young woman had so much down and hair on her face that she felt disgraced and decided to have them removed. She consulted a physician and he used roentgen-ray treatment, which proved successful so far as the disappearance of the hair was concerned. The young woman, however, had contracted a dermatitis from the roentgen-ray treatment, which, although it healed, left visible marks on the face. By reason of this fact she instituted a damage suit against the physician who had treated her. The court of appeals assessed damages

against the defendant in favor of the plaintiff, basing the decision on the statement that roentgenologic treatment may have grave consequences for the patient, even though minute precautions are taken, and in spite of the skill of the practitioner, and that, in view of the fact that the physician was not confronted with a disease which he was expected to cure but was only dealing with a simple physical imperfection which he was to get rid of or to conceal, it was a tort justifying an action for damages for the physician to undertake the responsibility of removing down and hair from the face of his client, thereby producing permanent lesions on her face. Responding to the appeal of the defendant, the civil chamber of the supreme court, taking into consideration the fact that the law charges the responsibility for damage caused to others to the account of the one who, through fault, negligence or imprudence, causes the damage, decided that the law applies to all torts whatsoever that any person, irrespective of his position or profession, may commit and which work hardship on others, and that no exceptions may be made in favor of physicians. Therefore, the supreme court decided that the assessment of damages against the defendant was justifiable, and rejected his appeal.

PSYCHANALYSIS

Recently the minister of a prominent church in Chicago was asked by the head of the social work department to put his approval on the establishment of a lecture course on psychanalysis. Being in doubt, he conferred with several medical men of his congregation. Finally a neurologist settled the matter by saying: "By all means have it. It should prove very popular. Half the congregation is already crazy and the other half is en route to the asylum." The jest was not wholly a jest. People are paying too much attention nowadays to their minds. An abnormal interest in the workings of one's own mind produces either an introspective philosopher or a "common nut." When the interest is related more or less distinctly to a concealed but nevertheless obvious fascination for cogitation on things sexual, it has elements of danger. Physicians are beginning to wonder where the normal interest of the layman in these subjects ends and the scope of the psychiatrist commences. We are flooded with books on the subject by lay psychanalysts; the "movies" picture it; the theaters dramatize it; the churches have lectures on it. In the not too distant future this psychanalytic craze, if it continues, will make the medical psychiatrist a very busy man.—Ex.

ANTISCORBUTIC PROPERTY OF DRIED ORANGE JUICE

Evidence is presented by Givens and McClugage to the effect that orange juice can be dried so that it retains a significant amount of antiscorbutic vitamin. The most satisfactory process for drying orange juice is the one in which the temperature of drying is not unduly high and the duration of drying is very short. If the orange juice is submitted to a temperature of from 55 to 60 C. for forty hours or more, a part of the antiscorbutic vitamin is destroyed. The dried orange juice investigated by the authors was active after three months storage. It is suggestive that the dried orange juice will serve as a convenient antiscorbutic for use in infant feeding, on polar expeditions, in the navy and for soldiers during the war.

SERUM TREATMENT OF EPIDEMIC POLIOMYELITIS

Among the eighty-five cases of epidemic poliomyelitis which occurred in Dubuque, ten patients died, a mortality of 12 per cent. Seventeen were not treated with Rosenow's serum; of these eight died, a mortality of 47 per cent. Sixty-eight patients were treated with the serum, and of these two died, a mortality of 3 per cent. In the two fatal cases conditions were such that curative effects of the serum could not be expected. The ages of the patients ranged from 2 weeks to 18 years. The average age of the untreated group was 4.8 years, and the average age of those treated was 4.7 years. The great majority of patients in each group were less than 6 years of age. The disease was about evenly distributed between boys and girls. There was no lull in the epidemic between the treated and untreated groups. The crest of the wave of the epidemic occurred seven days after the serum treatment was begun. There was no difference in the sevrity of the early symptoms in the two groups of cases. The differences in mortality and incapacity would seem, therefore, in Rowan's opinion to be attributable to the good effects of the serum.

Surgery

THE OPERATIVE TECHNIQUE IN SPINA BIFIDA

Eastman, J. R. (*J. Am. M. Ass.*, 1920, lxxiv, 156). The first step of the operation consists in taking every precaution against contamination of the wound. The importance of this cannot be overestimated as the one imminent postoperative danger in spina bifida is meningitis from wound infection. The possibility of contamination is especially great because of the fact that the site of the wound often lies near the anal region and is also in the direct groove along which the urine and faecaes are most apt to extend. With this fact in mind, the author places a piece of rubber dam over the tumor and sutures its lower border with fine chromic catgut to the skin of the child's back. By reinforcing this suture line with collodion, it may be made water tight. The rubber dam is then turned downward and the second step of the operation is begun.

In the second step the circular collar of true skin usually present about the base of the tumor is divided. When the scissors-spreading method of dissection is used, this circular incision may be made with little danger of the escape of fluid. The neck of the sac is then exposed in the same way as the neck of the sac of an umbilical hernia in the Mayo operation, freed of all fat and connective tissue, and grasped between the rubber-covered jaws of a pair of light, delicate intestinal forceps.

After the neck of the sac is clamped the sac is opened by snipping it through the thinnest part, which is usually at the vertex of the tumor. By opening it with a very small incision enlarged by scissors-spreading dissection, the cord and nerves may be saved from trauma. If when opened, the sac is found to be free from nerve elements, a stout ligature is applied under the clamp jaws, the sac is cut away, and the clamp is removed.

If the opened sac is found to contain cord or nerve tissue, these structures may be removed in some instances by blunt dissection while the light clamp is kept in place to prevent the escape of fluid and the entrance of infection. If necessary, the bony defect of the ver-

tebral column may be enlarged to admit of their replacement. This removal of bone can be done while the clamp is still applied.

After the neck of the sac has been tied and the clamp removed, no attempt is made to close the bony defect by an osteoplastic operation. The danger of this step probably offsets its few and doubtful advantages. The muscles are drawn together over the stump of the sac and the skin wound is closed with a continuous suture of fine chromic catgut either transversely or longitudinally, depending upon which is more easily accomplished. Haemostasis should be complete.

Procedures directed against wound contamination, which were begun by the stitching of the rubber dam to the child's back, are now completed. Collodion is applied over the wound line and over this a strip of gauze is placed, its edges being glued to the skin with adhesive plaster straps. This gauze and adhesive plaster are then painted with the collodion solution, after which the rubber dam protector is drawn up and laid flat upon the back, and its three remaining margins are glued to the skin by adhesive plaster straps. Next, a small triangular piece of adhesive plaster is so applied that a sharp point passes downward between the buttocks with the base of its triangle overlying the straps of adhesive plaster securing the lower border of the rubber dam. The adhesive plaster is then covered with collodion so that the zone of operation is sealed against infection by excreta.

The author's conclusions are as follows:

1. Spina bifida associated with increasing hydrocephalus is inoperable.

2. Spina bifida associated with paralysis should be operated upon only for the purpose of preventing subsequent ulceration and rupture.

3. A rubber dam stitched at one margin to the skin below the tumor, adhesive plaster, and collodion should be used to prevent faecal and urinary contamination.

4. The application of a light, rubber-covered clamp to the neck of the tumor is the safest method of preventing the loss of cerebrospinal fluid and of excluding infection from the cord.

5. Usually the sac can be tied off as in operations for inguinal hernia.

GASTRIC RESECTION AS THE METHOD OF CHOICE IN THE SURGICAL TREATMENT OF GASTRIC ULCER

J. Abadie (De la resection gastrique comme methode de choix dans le traitement chirurgical des ulceres de l'estomac). *Bull. Acad. de med.,* Par., 1919, lxxxiii, 370.) Abadie reports a series of 30 gastric resections performed for gastric ulcer which did not include a gastro-enterostomy or a resection of the ulcer.

The 30 resections included 17 immediate pylorectomies involving from 6 to 12 cm.; 1 pylorectomy performed two months after primary gastro-enterostomy; 2 pylorectomies done to supplement old gastro-enterostomies, and 10 extensive gastrectomies in 6 of which a side-to-side, and in 4 of which an end-to-side anastomsis was done. None of the operations was performed under general anesthesia.

These 30 resections, varying from a limited pylorectomy to a gastrectomy involving three-fourths of the stomach, re-

sulted in 28 recoveries and 2 deaths. Both deaths may be attributed to errors of technique.

The pathologic lesions were: ulcers of the lesser curvature, 8; ulcer of the anterior wall of the stomach, 1; double ulcer of the antrum, 1; mediogastric and pyloric stenosis caused by an old cicatrized ulcer, 1; hypertrophy of the pylorus, 1, and ulcers of the pyloric region, especially in the duodenum, 18.

If a patient in the forties gives a history of hypersthenic crises of increasing severity separated by gradually decreasing intervals of apparent recovery and the condition does not yield to medical treatment, operation is indicated. The history is the most important factor in the diagnosis; roent-genoscopy and examination of the stomach contents are merely confirmatory.

The author prefers gastrectomy to gastro-enterostomy as gastro-enterostomies often do not result in complete recovery and are frequently followed by recurrences, cancerous changes ,etc. The only factor which favors gastro-enterostomy is its simplicity and this is relative. —Ex.

A RATIONAL PROCEDURE FOR THE EXTIRPATION OF HEMORRHOIDS

J. H. Cahoon (*Med. Times,* 1918, xlvi, 208). To prevent the cicatrix which may follow after the clamp and cautery method, and the sapremia and sloughing following the strangulation method, the author describes an operation which he says obviates these difficulties. This procedure however concerns only well-developed hemorrhoids with hypertrophied tissue and large arterial blood supply, and not the small venour external tumors that can be slit and a blood-clot turned out.

Local anesthesia is used, eucaine being preferred. The hemorrhoid is drawn down, after being well injected, and looped in a wire snare similar to that employed in a tonsillectomy. Sufficient pressure is exerted to prevent the noose from slipping. A needle threaded with chromicized catgut is used to anchor a purse-string suture about the base on the proximate side of the wire noose. The mass is then eliminated by the cold snare. Occasionally the tough muco-cutaneous portion must be clipped with shears. The hemorrhage is then controlled by ligating with the purse-string suture, just sufficient pressure being used to prevent bleeding. Healing is more rapid, comfort to the patient is greater, defecation not so painful, and blocking of the bowels by opiates or astringents is unnecessary.—Ex.

CHRONIC BONY FISTULAS

Stoney uses bipp in these cases. The operation must be planned after the results of roentgenray examination are known. If possible the fistulous track should be excised right down to the bone, and the more of the fibrous scar tissue used the better. When the bone is reached, the periosteum should be raised for some distance all round the opening. The whole infected area of the bone should be explored thoroughly and laid open, all sequestrums and foreign bodies should be taken away, all overhanging walls removed by forceps or chisel, until the walls of the cavity in the bone slope gradually to the deepest point. If possible the bony walls should be gouged away till healthy bone is reached, as is shown by free oozing from the cut sur-

face. The whole wound is now dried and swabbed with ether or methylated spirit and packed for a couple of minutes with gauze wrung out of one or other of these liquids. Modified bipp (iodoform, 2; bismuth, 1, and petrolatum, 12) is then rubbed into the walls of the bony cavity, which finally is filled with it. If the cavity is small and regular, and it has been possible to remove its original walls fairly completely, and if there is a good depth of healthy tissue between it and the skin, the wound may be closed in layers, using one or two layers or even more of catgut for the periosteum and muscles, and silk impregnated with bipp for the skin and superficial fascia with a few sutures of fine silkworm gut to obtain good coaptation of the skin edges. Gauze smeared with bipp is placed over the wound and a thick layer of wool and a firm bandage is applied. If all goes well, the dressing need not be changed till the stitches are removed about the tenth day, when the wound will be found fairly healed. Eighty-eight per cent of cures are claimed.—Ex.

Book Reviews

NERVOUS AND MENTAL DISEASES

The New (9th) Edition

Nervous and Mental Diseases. By Archibald Church, M. D., Professor of Nervous and Mental Diseases in Northwestern University Medical School, Chicago; and Frederick Peterson, M. D., formerly Professor of Psychiatry, Columbia University. Ninth edition, revised. Octavo volume of 949 pages, with 350 illustrations. Philadelphia and London: W. B. Saunders Company, 1919. Cloth, $7.50 net.

In writing this book the needs of the student and the wants of the practitioner, as conceived by the authors, have been accorded first consideration. How well they have succeeded with the task is evidenced by the popularity of the work with the profession in general, and the fact of its having reached a ninth edition in an almost unchanged form will be accepted as ample proof. By those who may be familiar with the work it will be noted that the text on the subjects of General Paresis and Traumatic Insanity has been rewritten with some few minor changes and additions. A number of comparatively late views of more or less radical nature on certain subjects has been almost entirely ignored, the reasons for which the authors have intimated are that of doubtful utility and "lack of unquestioned establishment." But aside from all these the book undoubtedly remains a valuable, conservative and dependable guide and text book on this very complex subject.

HYDROTHERAPY

An Epitome of Hydrotherapy, for Physicians, Architects and Nurses. By Simon Baruch, M. D., LL.D., Consulting Physician to Knickerbocker and Montefiiori Hospitals, Consulting Hydrotherapeutist to Bellevue Hospital, New York City, formerly Professor of Hydrotherapy, College of Physicians and Surgeons, Columbia University. 12mo of 205 pages, illustrated, Philadelphia and London, 1920. W. B. Saunders Company. Cloth $2.00 net.

In this little book is contained much that will lead the thinking student and

practitioner into a field of practice heretofore largely neglected or not rationally cultivated. For this neglect, in a concluding chapter, the author states and discusses a number of reasons. In the opening pages the position by water in materia medica, the rationale of Hydrotherapy, shock and reaction, application of water in disease, the necessity of precision and causes of failures are discussed. A careful and extended technique is given, the right and wrong way stated and illustrated with numerous cuts. The procedures best adapted to such diseases as Typhoid Fever, Pneumonia, Neurasthenia, Neuritis, Chronic Rheumatism and Gout, Sunstroke and some others are given in detail. A majority of methods used in treatment of Sunstroke is condemned as being not only irrational but positively dangerous. The author gives a procedure in detail which he considers proper, rational and safely efficient. The whole work shows much of patient research and an honest determination to place Hydrotherapy upon the high level to which he evidently believes it is entitled.

SIMPLIFIED INFANT FEEDING

Simplified Infant Feeding, with eighty illustrative cases. By Roger H. Dennett, B.S., M.D., Associate Professor of Diseases of Children, New York Post Graduate Medical School; Attending Physician of the Children's Department, New York Post-Graduate Hospital; Assistant Attending Physician at the Willard-Parker Hospital and Pediatrist to the New York Lying-In Hospital. With 14 illustrations. Second revised and enlarged edition. J. B. Lippincott Company, Philadelphia and London.

This little book of 379 pages, excluding index, deals with a subject as old almost as creation itself but always new and of increasing interest as our knowledge expands and new problems present themselves for solution. For however much of useful knowledge as observation, teaching and experience may have evolved in the past much more remains to be acquired in the future. However this all may be, most of it may not be considered germane to the fact of the authors having laid the general practitioner, old or young, if such be found in this later day order of things, under great obligation for a concise though comprehensive aid to the successful feeding of their babies, as they occur in the pursuit of professional practice. The eighty illustrative cases, all types of "disorders, diseases and disabilities," occurring in the author's practice, the technique of treatment of which is carefully exemplified is of much practical value as to call forth encomiums from most readers. In this edition there has been new matter introduced consisting for most part of statements regarding Dry Milk, Andosis, Salts of Milk, the Hypertome Infant. Chapter on Diarrhoe, Vomiting, etc., have been revised and added to. A list of tables and caloric value of milk with different fat percentages is given. Chapter six sets forth condition under which caloric requirements should be disregarded. Illustrations exemplifying the text on such subjects as the correct way to give breast and bottle feedings, inserting tube for stomach washing, irrigating the bowel and paraphernalia for bottle feeding while primary matter of course, convey valuable hints and aid in bringing the book up to what is considered latest approved methods. A ready reliable quick reference book for the library table.

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FIFTY-FOURTH ANNUAL SESSION WEST VIRGINIA STATE MEDICAL ASSOCIATION

May 24, 25 and 26, 1921
Charleston, W. Va.

Register as soon as you arrive in Charleston at the Y. M. C. A. Lobby. Check your hats and give no tips at the door of the auditorium.

The General Sessions and Medical Section will be held in the Y. M. C. A. Auditorium.

The Surgical Section will be held in the Assembly Room, Hotel Kanawha. Rules for Papers: "No address or paper before the Association, except those of the President and Orators shall occupy more than twenty minutes in its delivery, and no member shall speak longer than five minutes, or more than once on any subject except by unanimous consent."

"All papers read before the Association shall be its property. Each paper shall be deposited with the Secretary at the close of its reading."

COUNCIL AND HOUSE OF DELEGATES

Monday, May 23, 8:30

The Council convenes in Y. M. C. A. Auditorium, Monday evening, 8:30 o'clock. Thereafter at the call of the Chairman.

The House of Delegates will meet in Y. M. C. A. Auditorium, Monday evening, 9:30. Thereafter at the time and place designated by the President.

ORDER OF BUSINESS

Call to order by the President.
Receiving Credentials.
Report of Committee on Arrangements.
Report of Committee on Scientific work.
Report of Committee on Publication.
Report of Committee on Public Policy and Legislation.
Report of Secretary.
Report of Treasurer.
Report of Council.
Report of Auditing Committee.
New Business.
Election of Officers. First thing Thursday morning.
Next Place of Meeting.
Unfinished Business.

OFFICERS
WEST VIRGINIA STATE MEDICAL ASSOCIATION
1921

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J. Howard Anderson ..... Marytown

FIRST VICE-PRESIDENT

H. E. Gaynor ..... Parkersburg

SECOND VICE-PRESIDENT

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C. G. Morgan ..... Moundsville
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DELEGATES TO A. M. A.

H. P. Linsz, Wheeling 1920-1921
J. R. Bloss, Huntington 1921-1922

EDITOR OF THE JOURNAL

J. R. Bloss ..... Huntington

COMMITTEES

MEDICAL DEFENSE
H. P. Linsz
C. R. Ogden
C. G. Morgan

WORKMEN'S COMPENSATION
John E. Cannaday

SCIENTIFIC WORK
J. Howard Anderson
H. Wade St. Clair
Robert A. Ashworth

PUBLIC POLICY AND LEGISLATION
G. A. MacQueen
F. LeMoyne Hupp
A. P. Butt

ENTERTAINMENT

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G. B. Capito
Mrs. J. E. Cannaday

ARRANGEMENTS

Charles O'Grady
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FINANCE

G. A. MacQueen
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RECEPTION

J. E. Cannady
P. A. Haley
R. A. Ireland
W. A. McMillan
B. S. Preston
C. A. Ray
G. C. Robertson
M. V. Godby
W. S. Shepherd
W. F. Shirkey
A. M. Reed
W. S. Robertson

(First named on each Committee is Chairman)

GENERAL ASSEMBLAGE

Tuesday, May 24, 9:15 A. M.
Y. M. C. A. Auditorium

Call to Order by Dr. J. Howard Anderson, Pres., Marytown.

Invocation, Rev. E. LeRoy Dakin, Charleston.

Address of Welcome on Behalf of City—Mayor Grant P. Hall, Charleston.

Address of Welcome on Behalf of Profession—Dr. W. W. Tompkins, Charleston.

Response on Behalf of the Association—Dr. Harry G. Steele, Bluefield.

SCIENTIFIC PROGRAMME

1. The Needs of Medical Education of the West Virginia University—Dr. J. N. Simpson, Morgantown.
2. The Advantages Gained by Co-operation of Physician and Pharmacist — John C. Davis, Ph. G., Wheeling.
3. Rupture of the Uterus by Pituitrin—Dr. Chester R. Ogden, Clarksburg.

MEDICAL SECTION AT Y. M. C. A.

Tuesday, May 24, 1:30 P. M.

4. Some Observations on Cerebro-Spinal Meningitis with Particular Reference to its Treatment—Dr. M. I. Mendeloff, Charleston.
5. Acute Polioencephalo-Myelitis with Report of Cases—Dr. G. H. Barksdale, Charleston.
6. Syphilis of the Central Nervous System—Dr. D. A. MacGregor, Wheeling.
7. Early Diagnosis of Brain Tumor before Eye Signs Occur: Diferentia from Encephalitis and Hysteria—Dr. Tom A. Williams, Washington.
8. The Mental Defective in West Virgina as Found by a Recent Survey—Dr. L. V. Guthrie, Huntington.
9. Endocrine Types of Dysmenorrhea—Dr. Martin V. Godbey, Charleston.

SURGICAL SECTION, KANAWHA HOTEL

Tuesday, May 24, 1:30 P. M.

10. The Palliative and Radical Treatment of Uterine Fibroids — Dr. Robert J. Reed, Wheeling.
11. Abdominal Caesarean Section with Report of Clinical Cases—Dr. Charles F. Hicks, Welch.
12. Caesarean Section with Report of Cases — Dr. W. H. Wallingford, Princeton.

13. Clinical Study of Ectopic Gestation —Dr. R. H. Walker, Charleston.
14. Two Abdominal Pregnancies in the Same Patient Following Supravaginal Hyserectomy—Dr. W. A. McMillan, Charleston.
15. Treatment of Infections of the Cervix—Dr. R. J. Wilkinson, Huntiington.
16. Pilonidal Cyst — Dr. Charles S. Hoffman, Keyser.
17. Reports of Cases—Dr. H. P. Linsz, Wheeling

GENERAL SESSION, Y. M. C. A.

Tuesday, May 24, 8:15 P. M.

18. President's Address—Dr. J. Howard Anderson, Marytown.
19. Oration on Surgery — Dr. A. P. Butt, Elkins.
20. Oration on Medicine—Dr. Walter E. Vest, Huntington.

MEDICAL SECTION AT Y. M. C. A.

Wednesday, May 25, 9:00 A. M.

21. Some Observations on the Treatment of Severe Anaemias and Allied Conditions—Dr. Charles W. Waddell, Fairmont.
22. Blood Transfusion — Dr. Leo D. Covert, Moundsville.
23. Chorea—Dr. S. D. Hatfield, Iaeger.
24. Central Pneumonia — Dr. H. M. Hall, Wheeling.
25. The Physiology of the Pylorus—Dr. E. J. Thomas, Morgantown.
26. Some General Considerations Regarding Gastric and Duodenal Ulcers—Dr. E. F. Peters, Princeton.
27. Blastomycosis of Internal Organs without a Skin Lesion—Dr. W. W. Golden, Elkins.
28. The Writing of Milk Formulas—Dr. C. L. Holland, Fairmont.
29. Resuscitation by Means of Adrenalin—Dr. Charles N. Bray, Morgantown.

SURGICAL SECTION, KANAWHA HOTEL

Wednesday, May 25, 9:00 A. M.

30. Cholecystectomy Increasingly Often the Operation of Choice in Gall-Bladder Disease — Dr. W. H. St. Clair, Bluefield.
31. Enterostomy, a Routine Practice in Intestinal Obstruction—Dr. J. Ross Hunter, Huntingtonn.
32. Congenital Hypertrophic Stenosos of the Pylorus—Dr. A. C. Harrison, Baltimore.
33. Some Minor Points of Major Importance to the Surgeon—Dr. Hugh G. Nicholson, Charleston.
34. Treatment of Infected Cavities—Dr. A. K. Kessler, Huntington.
35. Some Observations in the Treatment of Empyema — Dr. J. M. Emmett, Clifton, Forgre.

Discussion opened by Dr. Charles G. Morgan, Moundsville.

36. Prastatectomy — Dr. Louis Frank, Louisville.

GENERAL SESSION, Y. M. C. A.

Wednesday, May25, 1:30 P. M.

37. The Unsolved Problems of Preventive Medicine—Dr. Aaron Arkin, Morgantown.
38. The Relative Value of Methods of Studing the Lungs and Pleura—Demonstrated by Lantern Slides—Dr. Garnett Nelson, Richmond.
39. The Thymus — Dr. S. J. Morris, Morgantown.
40. Hyperthyroidism — Dr. Robert K. Buford, Hansford.
41. Simple Goitre: Its Treatment and Prevention—Dr. J. W. Moore, Charleston.

42. Conclusions Based on a Recent Series of Operations for Goitre—Dr. Stuart McQuire, Richmond.

ENTERTAINMENT

Banquet to the Members, Hotel Kanawha, Wednesday, May 25, 7:00 P. M.

SESSION OF THE HOUSE OF DELEGATES AT Y. M. C. A.

GENERAL SESSION AT Y. M. C. A.
Thursday, May 26, 8:45 A. M.

Election of Offcers.

Unfinished Business.

43. Treatments of Fractures, Illustrated by Moving Pictures and Lantern Slides — Dr. Fred H. Albee, New York City.

Discussion with special reference to Treatment of Fractures of the Femur — Dr. John E. Cannaday, Charleston.

44. Carcinoma of the Breast with Lantern Slides—Dr. J. Garland Sherrill, Louisville.

45. Of what use to the General Practitioner are the Tests of Renal Function—Dr. S. L. Cherry, Clarksburg.

46. The Value of Radiography and Cystoscopy Combined in the Diagnosis of Lesions of the G. U. Tract—Drs. Barker and Boice, Parkersburg.

47. Coincident Vesicle Calculi and Diverticula—Dr. John L. Crenshaw, Rochester.

GENERAL SESSION AT Y. M. C. A.
Thursday, May 26, 2:00 P. M.

48. Causes of Uterine Hemorrhage Illustrated by Lantern Slides—Dr. William S. Gardener, Baltimore.

49. Radium: Its Indications and Therapeutic Principles—Dr. C. J. Broeman, Cincinnati.

50. Some Observations on Trans-Duodenal Gall Bladder Drainage—Dr. T. P. Sprunt, Baltimore.

PUBLIC MEETING, HIGH SCHOOL AUDITORIUM
Thursday Evening, 8:30 P. M.

Address by Dr. Frank LeMoyne Hupp, Wheeling, W. Va.

Subject: Vital Factors in the Control of Cancer. (Lantern Slides.)

ENTERTAINMENT
IN HONOR OF THE VISITING LADIES

Tea at the Country Club, Wednesday, May 25, 4 to 6 P. M.

Tea by Mrs. Arthur A. Shawkey, 207 Beauregard Street, Thursday, May 26, 4 to 6 P. M.

Friday Morning, at 10 A. M., May 27, Automobiles will take the visitors to The Kelly Axe Manufacturing Company, The Owens Bottle Machine Company or The Naval Ordinance Plant.

HOTELS

All Conducted on European Plan. Make your reservations early.

Kanawha	$2.00 Up
Ruffner	$2.00 Up
Holley	$1.50 Up
Lincoln	$1.50 Up
Jefferson	$1.00 Up
Elk	$1.00 Up
Fleetwood	$1.25 Up
Peyton	$1.50 Up
Washington	$1.00 Up

Reserved Rooms: Holley 50 Rooms, Kanawha 50 Rooms, Fleetwood 25 Rooms, Elk 20 Rooms and Washing-ing 10 Rooms.

The Y. M. C. A. serves excellent dinners at noon at a very reasonable price.

HOW MAKE THE COUNTY MEDICAL SOCIETY HELPFUL

Read before the B. R. T. Medical Society.

By J. C. IRONS, M. D.,
Dartmoor

The organization of Medical Societies had a purpose, and was in response to a public need; though the ideal has not been attained, no one familiar with the present attainments , can reasonably question the good accomplished.

It is not my purpose to attempt to portray the great work done by the State and National Societies, but rather to confine my thoughts to what the County Medical Society is doing, or may do, in advancing medical thought, ethics and practice. The County Society is the primary unit, or base upon which all the other component societies are built, and largely they are a success, or a failure, just as the primary societies make them. I fear many of our members do not fully realize the good to the profession, as well as to the public, that has resulted from the medical societies. Many of us, confining our vision to the present, become pessimistic as to the value of the society, when but did we take a retrospective view, we would be amazed at what has been done. Largely through the stimulating influence of organization, the profession is making great advance, in social, professional and legislative conditions. This gain could not have been made, but for the co-operation brought about through the organized societies. Without the orgaanization, every physician working out his own problems, with little sympathy, for his co-laborers, no union of purpose or aim, there could be no union of thought or effort, and therefore no satisfactory result.

Before the organization, of the societies our physicians where not trained in medical ethics; were less sympathetic; more selfish, and less efficient, as the commingling of men and exchange of thought, always stimulates effort, and greatly aids in acquired knowledge.

One of the impelling forces that was the largest factor in forcing organization, was the lack of, and great need, of health laws. Before the societies came into existence, there was scarcely a law of any real merit, governing the practice of medicine, or any attempt at laws, to prevent the spread of disease. Preventive medicine, was almost unknown, quarantine was not thought of, and just any one who might choose to dispense medicine or practice surgery, could do so with no one to molest. The result of this condition is appalling to contemplate. Whole families were carried off by contagious diseases—such as small pox, diphtheria, typhoid fever and dysentery. The needless suffering and consequent loss, resulting from this cause, is sad to contemplate, but comforting when we realize how, through concerted effort we have passed this condition, and are living in an age far in advance of that period, which is not beyond the memory of many of us.

If it is true, that such happy results, have inured to us through the medical societies, and no one can reasonably doubt the fact, it is pertinent that we should inquire why so very few members of our society, make any attempt to avail themselves of the benefits to be obtained from the society, or do anything to advance the good of the society?

I am aware that some are so isolated by location, that regular attendance is impracticable, but occasional is possible, and should be imperative. Others, attempt to excuse, because they are too

busy. It has been my observation, as I believe it is of others, that our busiest physicians, are the most regular and active members of our societies. So that the lack of time, is not the real reason. It would be more truthful to own up, and give the real reason, as lack of interest.

Deplorable as it is, yet it is true, physicians allow themselves to get into that sordid, selfish, lackadaisical trend, and seem to loose all interest outside of themselves and their little circle of work. Thus losing all public spirit or desire to attain the best good for the greatest number. It would be sad to conceive all men to be of this class, Advance would be impossible, and present attainments would be lost.

I well remember, Dr. McCormack, in addressing an audience in Elkins, many years ago, on the necessity of organized medical societies, gave utterance to this thought, which I shall repeat in substance, as pertinant on this occasion. Said he, "If I had a family physician who was not an active member of his County Medical Society, I would immediately discharge him, and employ one who was and would advise you to do the same. No physician can keep in touch with the best medical thought, or best scientific trend of the medical thought of the time, who is not in active co-operation with his County, State and National Societies." If Dr. McCormack has the correct idea, what must be the public estimate of a large proportion of the members of the society? Many of our members have never attended a meeting of the society; they have no fellowship with our members; no knowledge of what the society is really doing; and seemingly little interest in its progress. Many are excusable, as we intimated, but with those who are in reach, no excuse can avail, and yet if Dr. McCormack's advice were followed, they would be shocked.

To my mind, the physician who is a member of his County Medical Society, and simply pays his annual dues, is about as useless as the church member, who pays his dues, and never goes to church, to help and encourage others, or to be benefited himself—Both are as useless as the drone in the beehive, and it might be wise to learn a practical lesson from the working bee, which summarily deals with the drone.

We may acquire wisdom from nature, or in practice when alone, but we can only get the best inspiration for using it when working shoulder to shoulder with our fellow men. It is this that the society gives us. We impart our best to others, and in return, receive the best from them. We imbibe the best from the rich experiences of others, and give of our store to them, and each is the better fitted for the future contests which may come upon him. We can be of material help, and we are recreant to our full duty if we neglect to do our part.

It is this spirit of co-operation, fellowship which has mainly brought about the present medical advance, and it is only by their faithful use, that we can reasonably hope to make progress in the future. Are you progressing, standing still, or retrograding?

I am making an appeal to the members of the society, for more loyal service. You owe this service for the good of the society; you owe it to your community; you owe it to your patients; and you owe it to yourself, most of all.

Those of you who have not had experience, can not realize how discouraging and trying it is, in trying to arrange a program, to find so few of the mem-

bers who are willing to render any aid in preparing papers, reporting cases, or doing anything, to make the meetings interesting or profitable. Judging by your acts, we are led to believe that most of you feel that you have met all your obligations, when you have paid your dues, and some of you even delay that duty as long as possible.

The paying of your dues, only admits you to the privileges, of the society, and you should feel that with the privilege, comes also your responsibility, and you are not faithful to your trust unless you assume and perform your part. Are you getting any help, or aiding any other member, by simply paying your dues, and never doing anything? You cannot develop unless you assimilate, and you can be of no assistance to others, unless you give out for them to absorb. Real society work is giving and getting. The best Medical Society, is not the one with the largest membership, but rather the one which has every member active in the work of the society. Some say: "Oh, your programs are so prosy, common or non-interesting that I get tired. Why don't you have something new?" The President and Secretary are only your servants; the society is yours, and it is only what you make it. If you have anything good, new or interesting, will you bring it in? If you know any one, in or outside the society, who has something good to give us, will you let us know? We surely do not feel authorized to bring some one from a distance, to address the society, when we can expect so few to be in attendance. It is much easier to knock, than to put your shoulder to the wheel, but which renders the greater aid?

Some of you have worn out your hammers, will you not lay aside these useless implements, and get on your "working clothes" and do some helpful service. Read a paper; discuss papers read; report a case; or simply be in your place, and help by your presence. The society needs you, and you need what the society can give you, more than the society needs you. It is impossible to impart aid or receive benefit, by "absent treatment." The wires must be in touch or there can be no communicating current.

Aside from the practical, or scientific, or clinical work of the society, there is a fellowship, a community spirit, which all physicians greatly need, and no where can they be so realized as in the active working of the society. Heretofore, the public looked upon the medical profession, as selfish, arbitrary, contentious beings, whose main delight was to deride each other; and judging by acts of many physicians and surgeons, the inference was not without much justifiable reason. The world is now learning that our profession, is the most altruistic organization known. They are learning that no member of the profession, can invent any instrument, discover any combination of drugs of great healing power, or keep from the public any knowledge helpful to humanity, or exploit the same or anything, for personal gain. He must give all for public good.

Even now, when we seek legislation, for public good, we are generally accused of doing from selfish purposes, forgetting that all the laws we advocate are for the good of the public, and not for our pecuniary gain.

We should not be placed in a position to be misjudged, and the best place to demonstrate your fellowship, is in your County Medical Society. We are social beings, and we do not develop the best within ourselves, or for others, unless we cultivate the common fellowship. We

need friends, and to make and hold them, we must show a friendly spirit, and most of all we must cultivate it in our Medical Society.

Let me conclude with a poem, "The Makin' of Friends."

THE MAKIN' OF FRIENDS

If nobody smiled and nobody cheered and nobody helped us along,
If each every minute looked after himself and the good things all went to the strong.
If nobody cared just a little for you, and nobody thot about me,
And we stood all alone to the battle of life, what a dreary old world it would be!

If there weren't such a thing as a flag in the sky as a symbol of comradeship here,
If we lived as the animals live in the woods, with nothing held sacred or dear,
And selfishness ruled us from birth to the end, and never a neighbor had we,
And never we gave to another in need, what a dreary old world it would be!

Oh, if we were rich as the richest on earth and strong as the strongest that lives,
Yet never we knew the delight and the charm of the smile which the other man gives,
If kindness were never a part of ourselves, though we owned all the land we could see,
And friendship meant nothing at all to us here, what a dreary old world it would be!

Life is sweet just because of the friends we have made and the things which in common we share,
We want to live on not because of ourselves, but because of the people who care;
It's giving and doing for somebody else —on that all life's splendor depends,
And the joy of this world, when you've summed it all up, is found in the making of friends.

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THE INTERNAL SECRETIONS

Read before the Monongahela County Medical Society March 22, 1921.

By J. E. THOMAS, M. D.,
Asse. Prof. of Physiology, W. Va. U. School of Medicine,
Morgantown.

No single recent advance in medicine has attracted such widespread attention in both professional and lay circles as the modern studies on the internal secretions. So strong has been the appeal to the popular imagination that the way has been made easy for unscrupulous venders of nostrums, who, when business is dull find it necessary only to call their product by the name of some endocrine gland to insure a revival of trade. Also members of the profession face a strong temptation to cater to this popular fancy to a greater extent than the present state of our knowledge would justify. Honest physicians are subjected constantly to a one sided propaganda by manufacturers of organotherapeutic preparations, a great many of which are useless or unsafe. Although facts of the utmost importance in both diagnosis and therapy have been brought to light, to glean the

few gems from the mass of material published on the subject possibly requires more time than the average physician is able to devote to reading. It is with the hope of diminishing the labor of this task to some extent for those who may be interested that the present paper is presented. In it I am offering nothing new, but merely a summary of some of the views of the laboratory and clinical men who are devoting time to this particular branch of medical science. I will also mention a few of the more recent advances that have been made.

A brief review of fundamentals will perhaps be advisable. The organs of internal secretion, or the endocrine glands as they aare frequently called, glands as they are frequently called glands as they are frequently called, outlet for their secretions. It is supposed that the products of their activity are poured back into the blood, hence the name *internal secretions*. Such organs are: the anterior lobe and pars intermedia of the pituitary, the thyroids, parathyroids, and thymus, the cortex and medulla of the suprarenal body, the islands of Langerhans of the pancreas, and the interstitial tissue of the ovaries and testes. To this list some would add the pineal gland. There are other so called ductless glands, for instance the spleen, which are not included, as well as certain organs known to form internal secretions, such as the liver which, in addition to its external secretion, is supposed to be the source of many important substances which are poured directly into the blood after the manner of internal secretions.

The reason for including just the structures named and no others is that their functions are all in a way similar, and different from those of other organs and tissues. Together they appear to constitute a system, the parts of which are interdependent, for the control of physical and mental development and the regulation of metabolism. They are supposed to accomplish these results by contributing to the blood small amounts of very active substance, many of which are necessary for life, and all of which, in properly balanced proportion, are necessary for normal growth and development, and for the proper functioning of the mind and body after maturity. But little progress has been made in the study of the chemical nature of these substances. A relataively simple alkaloid-like compound has been isolated from the adrenal, and a crystalline iodine compound obtained from the thyroid. Both substances have been made synthetically. If these should prove to be typical internal secretions the chemistry of all of them should be ultimately solved. So far as our present knowledge goes they resemble the potent drugs and possibly act in a similar way.

Before leaving the subject of the function of the endocrine glands in general it may be well to mention an older view which has not been altogether abandoned, to the effect that the structures which we now call endocrine glands function in the destruction or neutralization of toxic substances in the blood. Recently this idea has been revived to explain some work on the parathyroids. Popielsky believes that adrenalin is a poison which is destroyed by the adrenal. However the majority of physiologists hold to the view that the endocrine glands are really secreting glands which contribute definite substances to the blood.

The organs of internal secretion may be regarded as constituting a system for the coordination and control of the body by chemical means through the

medium of the blood and lymph, somewhat akin to the control maintained by the nervous system by more direct communication through the peripheral nerves. Each system is able to influence the other. The chemical coordination is supposed to be the more primative of the two.

The endocrine glands are frequently the seat of pathological processes which may either increase or decrease their activity. Many diseases, formerly of unknown etiology, have been shown to be the result of such changes. As examples may be mentioned acromegaly, gigantism, infantilism, cretinism, Graves's disease, myxedema, diabetes insipidus, diabetes mellitus, and Addison's disease. The explanation of these and other diseases on this basis has not only pointed the way to rational therapy for many of them but it has contributed largely to our knowledge of the function of the particular gland concerned. The last word has not been said and much progress may be expected along this line. Other diseases will no doubt be added to the list. Certain forms of insanity, moronism, prostitution, and sexual perversions may perhaps belong to this class. Some recent observations by Professor S. J. Morris (W. Va. U.) (1.) show that certain criminals, murderers in particular, show constantly an abnormal peristence of the thymus gland. These observations will be discussed in more detail later.

As an illustration of what is being accomplished on the clinical side by the study of the internal secretions by practicing physicians I will review briefly an article by Wm. Englebach of St. Louis. (2.) This article is based on a study of 892 cases of disease of the endocrine system which were met within his practice. Of these he classifies:

147 as diseases of the pituitary,
350 as diseases of the thyroid,
194 as diseases of the sex glands,
186 as pluriglandular,
10 as diseases of the adrenals,
5 as diseases of the thymus.

The article is devoted mainly to a classification of the diseases of the pituitary, a subject concerning which there has existed up to the present a great deal of confusion for reasons which will be apparent shortly. It is possible to give only a very much abbreviated and somewhat paraphrased summary of his excellent classification in this short discussion.

He divides diseases of the pituitary into (1.) diseases of the anterior lobe, affecting mainly development, especially of the osseous structures and the genitals, and (2.) diseases of the posterior lobe, affecting mainly metabolism, sugar tolerance and the secretion of urine.

Diseases of the anterior lobe are further divided into *hyper*secretion and *hypo*secretion and each of these classes is further subdivided into a preadolescent and postadolescent, or, as occuring before or after puberty. Diseases of the posterior lobe are classified simply as *hyper* and *hypo*secretion. According to this agreement the following conditions are recognized:

I. Diseases of the anterior lobe.

1. Preadolescent *hyper*secretion. Characterized by overgrowth of all the bones including the long bones. The individuals so affected grow to unusual height. The genitals are normal or overdeveloped.

2. Postadolescent *hyper*secretion, or acromegaly. Characterized by overgrowth of the short and flat bones but not of the long bones. The sex function is usually exaggerated.

3. Preadolescent *hypo*secretion. Characterized by a failure of growth of all

the bones including the long bones, and a persistent infantile condition of the genitals.

4. Postadolescent *hypo*secretion. There is a cessation of growth of the short and and flat bones. The genitals cease to develop and may undergo regressive changes. In any case they cease to function and amenorrhea or impotence results.

II. Diseases of the posterior lobe.

1. *Hyper*secretion. Characterized by decreased sugar tolerance and increased metabolism. There are intermittent attacks of glycosuria which have no relation to diabetes mellitus. The sugar appears in the urine after meals rich in carbohydrate, after severe muscular exercise, excitement, etc. The weight is likely to be below normal because of the increased metabolism.

2. *Hypo*secretion. Characterized by increased sugar tolerance aand hypersecretion of urine, or diabetes insipidus. In addition there is diminished metabolism which results in obesity.

All of the foregoing conditions Englebach classes as hormonic signs because they are supposed to result from disturbances in the secretion of the specific hormones, or internal secretions, of the gland. He also calls attention to another set of symptoms which he calls "local signs," and which may accompany any of the above diseases when there are due to growths affecting the gland. These are simply pressure symptoms, the most characteristic of which is blindness in the outer half of each visual field (the nasal half of each retina) due to pressure on the optic chiasma and the inner side of the optic tracts. Other signs are: broadening of the space between the eyes, and in severe cases, the ordinary signs of intracranial pressure such as headache, slow pulse, high blood pressure, etc. Lesions of the gland affecting its size produce changes in the bony parts around it which can be readily seen in x-ray pictures of the skull.

It must be evident that a tumor growth impinging on the pituitary would not be likely to affect one lobe and not the other. Consequently mixed conditions are not uncommon, exhibiting hypo— or hyperactivity of both lobes or hyperactivity of one with hypoactivity of the other. Frequently a case beginning with hypersecretion ends with a complete loss of secretion, and since the changes in development are almost always permanent, a case may present the physical signs of hypersecretion and the functional signs of hyposecretion. It is not surprising that different observers have differed widely in their interpretation of these conditions and that there should be considerable confusion in the literature of the subject. In so far as Englebach's classification shall prove to conform to observed facts it may be regarded as the greatest advance to date in the direction of securing some degree of order in this chaotic field.

It will not be possible to discuss all of the glands of internal secretion in detail. Most physicians are perfectly familiar with the known facts relative to the normal functions of the thyroid and diseases affecting that gland. It may be of interest to recall the finding by Wilson (3.) of degenerative changes in the superior cervical ganglion of the sympathetic, from which the thyroid receives part of its nerve supply, in cases of exophthalmic goiter. He regards these changes as due to an infectious process but the evidence is not conclusive.

Of somewhat greater fundamental interest is the work by E. C. Kendall of the Biochemistry Section, Mayo Founda-

tion, Rochester. He has succeeded in isolating a compound from thyroid substance which may prove to be the hormone secreted by the thyroid gland. It contains iodine, is crystalline in nature posesses a relatively simple structure, and has been produced synthetically. The paper (4.) in which he decribes the researches which culminated in obtaining this substance in crystallin form, is not likely to be surpassed in this generation for a combination of scientific and human interest. The substance has been given the name "thyroxin." It has been shown to posess the properties of active thyroid substance, is efficient in treating myxedema etc. If it should prove to be the actual secretion of the thyroid gland it will be the second internal secretion to be isolated and chemically identified, adrenalin being the other. Efforts to show that the active principle of the posterior lobe of the pituitary is identical with histamin have not met with general acceptance.

Very little is known of the function of the parathyroids. When they are removed a form of tetany appears which eventually results in death. One view is that they destroy guanidin, a substance which may be formed in the metabolism of proteins and, when present in excess, produces symptoms similar to parathyroid tetany. The more common view is that they secrete something necessary for the utilization of calcium salts. This view is based on the fact that calcium deficiency can produce tetany and calcium salts are curative to a certain degree in parathyroid tetany.

Considerable interest has been aroused recently by the remarkable observations of Professor S. J. Morris on the thymus gland. (1.) He finds that this gland is abnormally persistent in the bodies of 100% of the men executed for crime, which have come into his laboratory. He calls attention to the fact that the thymus appears to be in a state of functional activity till the time of puberty when it begins to atrophy so that in the normal adult it is represented only by a few remnants embedded in the mediastinal fat. Occasionally it persists and may even increase in size to such an extent as to embarrass respiration and heart action. In certain instances such persistence constitutes part of a defiite pathological process known as status thymo-lymphaticus. Persons affected with this condition are said to be unusually subject to sudden death from minor causes. Judging from the findings of Morris there may also be certain mental defects associated with a persistent thymus which predispose to foolhardy acts such as murder. He interprets the condition as a lack of normal cerebral inhibition.

Very little is known definitely of the function of the thymus. It is in some way concerned with the processes of growth and seems to be unnecessary when development is complete. Since it disappears at maturity a persistent thymus may mean that the process of maturity, of both mind and body, has not gone on to completion. The persistent thymus might be the cause of the condition or one of the effects. The feeding of thymus gland to tadpoles prevents their metamorphosis and causes a persistence of their immature condition, a fact which argues very strongly for the contention of Professor Morris that the thymus is the cause of the undeveloped state of mind which may give rise to criminal tendencies. It would be extremely interesting to study the condition of the thymus in morons and persons with minor criminal tendencies, such as prostitutes, a great majority of whom have

been shown to be mentally immature.

The next endocrine gland in order is found in the pancres and constitutes the so called islands of Langerhans. The secretion of these structures appears to be necessary for the utilization of dextrose by the tissues and they are generally found to be diseased in diabetes mellitus. Complete removal of the pancreas causes this condition but ligation of the pancreatic ducts does not, so the factor concerned is an internal secretion and not the pancreatic juice. Whether the internal secretion is formed by the islands of Langerhans or by the same tissue which produces the external secretion is an open question. The majority of the evidence favors the islands of Langerhans.

When we come to discuss the adrenal gland we are really speaking of two distinct structures, the cortex and medulla. While these structures are intimately associated anatomically in most animals including man, this so far as is known is their only relationship. The cortex is of mesoblastic origin and might be supposed to have some relationship to the kidney or the testis with which it is associated in development. The medulla developes in intimate relation to the sympathetic nervous system and like all nervous tissue is epiblastic. Its function seems to be closely associated with that of the so called true sympathetics.

With regard to the specific function of the adrenal medulla, and its secretion, epinephrin (adrenalin), our ideas have undergone complete revision within the last few years and are still far from being settled. The older idea that the adrenals control the blood pressure by means of epinephrin has been completely abandoned by most physiologists for the very obvious reason that there is never enough of the secretion in the blood under ordinary conditions to affect the blood vessels, and the first effect of an increase in the amount is to lower rather than to raise the blood pressure. A further increase, but still not enough to raise the blood pressure, causes paralysis of the intestine, a condition which would soon become serious if the blood pressure were maintained by the action of spinephrin.

It has also been shown that the low blood pressure and general asthenia seen in Addison's disease is due to a loss of the adrenal cortex which does not secrete spinephrin, and not always to destruction of the medulla of the gland. Death from complete removal of the adrenals is due to heart failure, the blood vessels remaining in a good state of tonus till near the end. It is generally believed at present that death is due to removal of the adrenal cortex and not to the absence of epinephrin. The administration epinephrin does not delay death in these cases.

This view was replaced by the theory of Cannon (5.) that the adrenal glands are stimulated to liberate adrenalin in unusual amounts in times of stress such as fear, anger, pain, etc., and by raising the blood pressure, stimulating the muscles, increasing the coagulability of the blood, and doing a number of other things of which adrenalin is capable, aid in flight or combat as the case might demand. This theory is the most attractive that has so far been proposed and has many adherents at the present time. However, many eminent physiologists regard it with skepticism. Professor Stewart goes so far as to say that Cannon's results were obtained with unreliable methods and discounts the whole idea. Since he has nothing better to propose it is perhaps best to adhere to Cannon's view, at least for the present, that adrenalin is an emergency substance,

useful only in times of stress or danger when unusual activity is necessary.

Our ideas in regard to the function of the adrenal cortex are still less definite. It is evidently the more important of the two parts of the gland since in certain species in which the cortex is separate from the medulla, removal of the cortex alone produces all of the symptoms of adrenal extirpation. It has some relation to sexual development because tumors of the cortex frequently result in sexual precocity. The cells have all the characteristics of actively secreting tissue and certainly produce something very important and necessary for life. The secretion no doubt aids in maintaining the normal condition of the muscles and especially the heart muscle. Destructive lesions of the adrenal cortex produce Addison's disease.

The function of the sex glands remains to be considered. Obviously they have the function of producing sperm and ova. That they do something more than this has long been known, but the scientific study and interpretation of this other function is a matter of comparatively recent years. Steinach (6.) and others have shown that the physical difference between the sexes as well as the difference in their psychic reactions is due to the influence of the sex glands. Castration of either sex at a sufficiently early age results in the development of a sexually indifferent type, while males may be changed into females, both in appearance and in character, by removing their testes and substituting ovaries in their place. In a similar way females may be converted into males. In such transplanted glands the germinal tissue undergoes atrophy and eventually disappears while the interstitial cell of Lydig increase in number. This places the responsibility for sex differentiation on the interstitial tissue. Therefore in order to describe minutely the function of the interstitial tissue it is only necessary to compare males with females in any given species and to compare both with sexually indifferent types produced by early castration. In this way we can ascribe the distinctive coloration of certain birds, the antlers of the stag, the lion's mane, as well as the angular shape and special distribution of hair in the male human, to the effect which interstitial secretion has on bodily development. The smaller size and more graceful lines of the human female are likewise determined by interstitial ovarin secretion.

The effect of the interstitial secretion on the character presents a still more interesting problem. The aggressiveness, courage and combativeness of the normal male and the relative timidity of the average female make an interesting comparison. Steinach has shown definitely that these characters disappear from the male with atrophy of the testes and can be restored by means of testicular transplants. His work is hardly necessary in view of the examples we have constantly before us. A comparison between a bull, and an ox or a cow, or between a stallion, and a gelding or mare would make sufficient evidence on that point.

All of these things are more or less obvious. The most interesting part of the work of Steinach, and later of many other, is the finding that senility is directly concerned with the atrophy of the sex glands and the loss of interstitial secretion. He appears indeed to have found a veritable fountain of youth in the ovaries and testes. There is not time for a detailed description of his results, but in brief, he found that by taking the testes from young animals and trans-

planting them into the bodies of old ones he was able to restore the condition of youth in the old animals so that they recovered their virility, combativeness etc. Their strength returned and their appetites improved, they recovered interest in their appearance, and most remarkable of all, their own testes recovered their lost activity and they were able to impregnate females and produce offspring. Similar results were obtained with females, some of whom became pregnant and gave birth to young long after the reproductive age. Work of the same sort has been done on humans and the same results obtained except, so far as I know, there has been no demonstration of restored fertility. This may be due to the fact that it is less convenient to test this function in the human. Virility has been restored in certain cases, some of whom had been previously castrated.

However immortality has not been discovered. Steinach was able to prolong the life of his animals from 30 to 50% over the normal but after a time they suddenly died, apparently from exaustion of the central nervous system.

The application of these results in the human on a large scale is difficult because testes from the same species must be transplanted and human testes are not easily obtained. It is to be hoped that a way will be found to utilize the constituents of testes of lower animals without actually transplanting the tissue but so far results along this line have not been encouraging, newspaper stories to the contrary notwithstanding. The situation is further complicated by the fact that the material, in order to be viable, must be relatively fresh. The human testes used so far have been mostly obtained from fatal accident cases and from executed criminals. A few have been purchased from healthy individuals.

In conclusion a word may be said regarding the interrelation between different glands of internal secretion. As already pointed out, sexual development may be influenced by the adrenal cortex and the pituitary. The same may be said for the thyroid and thymus. Since none of these glands can produce a sexually normal individual in the absence of the sex glands proper, the inference may be drawn that they exert their influence indirectly through the ovaries and testes.

Similar correlations are known for the effect of various endocrine glands on other functions. Sugar tolerance may be mentioned as an example. This is diminished by extracts of the posterior lobe (or pars intermedia) of the pituitary, by thyroid secretion, and by epinephrin. It is completely lost if the pancreas is removed.

Both the thymus and pituitary stimulate growth. The sex glands and the thyroid appear to depress it to a certain extent. The supposed antagonism between the thymus, and the thyroid and sex glands, in their effect on the process of maturity at puberty has already been mentioned.

The rate of metabolism is increased by the pituitary as well as by the sex glands, the thyroid, and epinephrin. Certain cases are known in which the removal of one gland results in hypertrophy of another. We know very little of the meaning of all of these things. Certainly not enough to raise so called "polyglandular therapy" from its present status of empiricism. They suggest however a close relation between the function of the true glands of internal secretion and furnish the basis for the statement made in the beginning, that

the secretion of all of them, in properly balanced proportion, is necessary for normal growth, development and function.

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THE ACUTE ABDOMEN

Read before Barbour-Randolph-Tucker Medical Society, 1921.

By A. P. BUTT,
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Apologies to Dr. Deaver whose paper I have not read. This paper was suggested by the distress of one of my associates at his failure to differentiate between a perforating ulcer of stomach and a perforated appendix.

Now I shall make no attempt to aid you in differential diagnosis. Rather I shall advise that you make no such attempt, unless it be as a mental gymnastic feat and that you keep such conclusions to yourself.

Why should it concern you as to whether the trouble originated in the appendix, whether it is a perforated gastric or duodenal ulcer, a ruptured gall bladder, a perforated intestine from typhoid, bullet wound, kick of a horse, passing of a wheel, blow, ectopic, ruptured uterus, spleen or any other vicera?

Each and every one of these things constitute a catastrophy which can not be cured by medical means, only by surgical.

Nearly all of them are curable by surgery if operated in time, nearly all of them are incurable if allowed to go too long.

Time is the all important element, given the time elapsing from onset to operation and you can almost predict the outcome with certainty.

A few months ago a man got off the train here at same time I got off, without any examination whatever, merely relying on the time he told me had elapsed from the onset of his trouble and the look upon his face I informed the undertaker that he would be needed in a few hours.

The trouble proved to be a strangulafed hernia of four days duration and my prediction made to the undertaker was correct.

If we grant that time is the all important element and we must grant it, how are we to operate upon this class of patients sooner?

We will make progress if we forget most of the time honored text book signs. Doubtless they were good in their day but that day has passed. Anyway most of them were signs of PERITONITIS, NOT of injury. LATE signs, not early signs.

Let us remember that medicine is progressive and that sad to say not all the men whose names we have learned to revere have progressed with it.

Let us take a lesson from our own experience, not rely too much upon others.

A little assurance comes in good at times.

When Job lay in sack cloth and ashes his three friends bluntly told him that his sins had found him out, that he was paying up for past pleasures. Then did Job in words that must have withered them say: "Doubtless ye are the people and wisdon will die with you, but I too have an understanding and am not inferior to you."

In the not far distant past I listened to a paper on gun shot wounds of the abdomen by a man from one of our larger cities, a man whose name I hear oftener than any other from his section. This paper was read before the Surgical Section of the A. M. A.

Imagine my astonishment when we were advised to wait the onset of certain symptoms after gun-shot wounds, such as increase of pulse rate, increase of temperature, increase of rigidity. In other words the onset of peritonitis. In a case where it is at all probable, yea at all possible that the abdomen may have been penetrated, my advice is to open and see.

I have never yet seen a death from opening the abdomen where there was no pathology.

One good sharp blow with the finger, especially when the patient is not looking, is worth far more than all other signs to me. Originated I believe by Murphy and styled piano percussion.

If that patient jumps, from pain, not from nerves, operate and it is indeed seldom you will be mistaken. I rely on it almost altogether.

The history is a very important matter and not duly appreciated. In the majority, not all, of these abdominal catastrophies there is much pain. To reverse it, where there is much abdominal pain in by far the majority of cases there is some pathology other than belly-ache.

Doctor it cannot make us proud when we find a patient to whom we have been giving hypodermics for indigestion or belly-ache has some real pathological condition either acute or chronic.

Try the simple things rather than the complex.

During the past three years I have had a number of patients brought to the hospital with empyema, whose attending physician was unduly exercised as to whether pus would be found. Now these brethern had been reading their text books or at least had gone over in their minds the classical symptoms as laid down in text books, differentiating between dullness and flatness, vocal resonance, vocal fremitus, acgophony, etc., etc.

Doubtless all very well in their way, but how much more valuable to remember that this child DID HAVE PNEUMONIA, that its temperature either did NOT fall when you expected it or having fallen did rise again.

Then hit it on both sides with your percussion finger and see if one side sounds like the cider barrel in the fall and one like the cider barrel in the spring. Apologies to Morris.

True the patient may have a malignant growth but how many of those do we see? Not enough to concern us.

If you play safe and bring these people to operation at the very onset of the trouble you will occasionally be chagrined by an apparently needless operation, a mass of lumbricoides appendicular colic BUT your patient will be alive.

I would not intentionally minimize the dangers of an operation, I full well know that the anesthetic may kill, that accidents may happen but the number is very small indeed.

I do not recall ever having seen in my own practice or that of others a death follow an operation where no pathology was found.

Think of the reverse: how many, *many* deaths have followed delay, most of which could have been prevented.

If we are honest with ourselves I think all of us must have been culpable.

The first death I recall of this kind was that of a saw mill man who had been hit on the abdomen with a bolt. I have since been informed that this practically always causes death. At that time I did not know it.

My experience was small, there were no hospitals in this part of the country and the man was allowed to die of peritonitis.

Allow me to call your attention to the fact that a blow upon the abdomen very often ruptures intestines or other abdominal viscera and when it does this usually, if not always, is due to impinging upon the vertebra. Especially is this true after a kick from a horse. I dare say all of us have lost patients from typhoid perforation. Certainly some of these are curable by timely operation.

While none of what I might term abdominal calamities mentioned above are exceedingly rare, it is the appendix which is oftenest at fault.

Notwithstanding all that has been written every hospital is still receiving its pus cases.

Every pus case means a mistake, let us hope of the patients; but alas, we know that oftimes it is our own.

Every pus case means drainage, a weaker abdominal wall, likely adhesions, a longer stay in the hospital, more expense.

How would it look as a matter of book keeping.

Dr.

To a very occasional operation in which nothing is found.

A slight, very slight, risk.

To the necessary expense incurred.

To the time lost.

Cr.

By the saving of almost every life.

By the avoidance of drainage with its attendant evils.

By time saved, instead of 3 weeks to 3 months, two will almost always suffice, oftimes less.

By saving of reputation of physician.

DON'T ATTEMPT TO MAKE A DIFFERENTIAL DIAGNOSIS.

Simply say the patient has an acute malady which now is or soon will be inflamatory, that operation is indicated, that early operation is very safe, that late operation is dangerous.

That the deaths of which the patient has known and heard were from peritonitis, not from the original trouble, that the deaths were not from operation but failure to operaate early enough.

Venning used to tell me how he let the people know the condition of the patient without letting the doctor down too hard. To the question so often asked "how much do you charge for an appendix operation?" he would answer, "I shall not operate for appendicits but for peritonitis.'

Above all things do not wait for temperature. Many of the very worst cases show a normal or subnormal temperature.

Don't be misled by cessation of pain, very often this simply means the completion of rupture.

If at all possible to do so don't give morphine until after your diagnosis is made.

If forced to give it warn the patient that the relief he will experience is due to the morphine, not to an improvement in his condition.

With most patients you will have to give something.

I give a bitter placebo in drop doses.

Above all things don't give cathartic.

It seems to me almost criminal in this day to give cathartics to an abdominal case.

It is far preferable to give morphine.

In my early days I used the Alonza Clarke method of treating peritonits occasionally with seemingly good effects.

If your patient absolutely refuses operative proceedures in any acute abdominal operation try this: Give him morphine or opium until his respiration rate drops very low.

The mistakes that we could not have avoided, that our opportunities did not allow of correction or our mentality could not grasp, need not worry us, but how terrible are those we make with no excuse.

How delighted I was recently to get a patient through with twelve perforations of the intestine, how cast down shortly thereafter to lose one from an utterly in-excusable error in failing to diagnose a calamity of some description after the passing of a wheel over the abdomen.

Why do we fail? Lack of nerve. We simply have not got the courage to tell the patient the thing we know he does not want to hear.

Then, too, some of us think our prestige will be hurt if we talk of operation too much, send too many to the hospitals.

In this I believe we are wrong. All my professional life I have referred all injuries of the eye without any delay whatever, It has not hurt me.

I have in mind three physicians of very mediocre attainments, they do not attend medical societies, they do not read journals, they fail in many ways, but they do have good horse sense and they do know when their patients are in danger, and they do have extra large practices.

How often I have heard it said of them, "I am not afraid to trust Dr. —— he knows when to call for help."

On the other hand, I know a man of far more than ordinary attainments, I should be happy if I were as well posted along certain lines as he is. This man has not as large practice as the three men above mentioned, he never will have unless he changes his ways for he boasts that he never refers a patient unless in case of absolute necessity.

I trust you have grasped my idea, don't wait to make a differential diagnosis in abdominal, disasters, simply learn to grasp a few of the salient points indicating impending trouble. THEN act and act quickly.

The longer I practice the more I believe that the time for decision is BEFORE I see the patient, not after. I should at my leisure decide on what I belive to be the best thing to do when certain conditions arrive. Then when confronted with these conditions I should act on my previously formed opinions.

THE DIAGNOSIS AND OPERABILITY OF EXOPTHALMIC GOITRE.

By WILLIAM R. LAIRD, JR. M. D.,
Montgomery, W. Va.

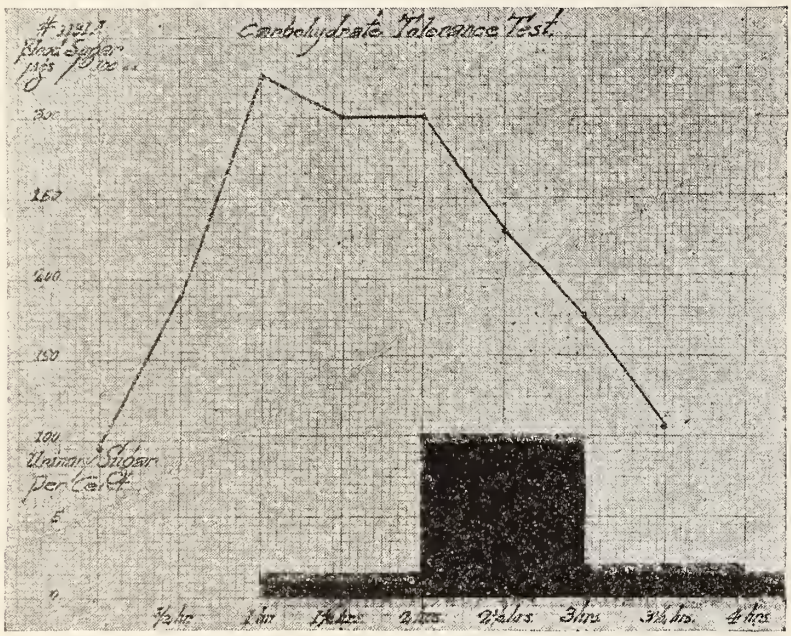
Numerous articles have been contributed to American literature during the past few years upon the surgery of the thyroid, its function, and the chemistry of the thyroid hormone. Marine, Bebe, Oswald and Kendall, by their careful and thoroughly original investigations, have thrown considerable light upon the physiology of this important gland of internal secretion. In 1896 Baumann claimed to have isolated from the thyroid a body containing iodine and possessing the physiological characteristics of the thyroid, but it remained for Kendall, in 1914, to report the isolation as a pure crystalline substance, the organic nucleus containing 65% iodine. Since Kendall's epoch making investigations, solving the thyroid problem, more attention has been centered on the thyroid from a diagnostic standpoint than ever before.

Too frequently patients with a slight or moderate enlargement of the thyroid, and giving a history of nervousness, palpitation and tachycardia, are given a diagnosis of hyperthyroidism without any special effort being made to differentiate this condition from incipient pumonary tuberculosis or neurasthenia. This differentiation has, in our experience, been quite difficult, especially between hyperthyroidism and neurasthenia, or nervous exhaustion. For a number of practical, as well as scientific reasons, it is important that the possibilities of error in diagnosis be reduced to a minimum. The data accumulated in making a differential diagnosis between these conditions is of great value in the estimation of the operability of exopthalmic goitre patients. The history of a rapid onset with exacerbations, loss of weight, recent infection; the nutritional state and the condition of the myocardium, are of diagnostic value but not pathognomic.

During the past five years the science of blood chemistry has been one of the most progressive and most active branches of medicine, therefore, special mention should be made concerning the technique and value of the carbohydrate tolerance test in the diagnosis of thyroid over-activity. The fasting blood is taken, 1.75 gem. of glucose given to every kgm. of body weight to the fasting patient; blood sugar estimations are made every 30 minutes. Normally, there is no hyperglycemia noted at the end of one hour. McCaskey has pointed out that in hyperthyroidism there is a diminished tolerance to carbohydrates with alimentary hyperglycemia, and also glycosuria where the hyperglycemia exceeds the renal threshold. Hemmeter calls attention to the puzzling fact that in hyperthyroidism with its excessive oxidation, the proteid molecule is split up, but the carbohydrate molecule is not split. Barker attempts to explain why the most difficult molecule is split and the easier remaining untouched by stating that the sugar molecule in some states is mobilized more quickly than under normal conditions, and suggests that the hyperglycemia be looked upon as the result of a sudden and rapid mobilization of sugar. In hyperthyroidism we have noted the maximal curve at the end of one hour with a fall towards normal at the end of two hours. Janney has noted an abnormally high curve in pituitary disorders, Addison's disease, and certain

other endocrainopathies, therefore we do not look upon this test as specific in its diagnostic importance but consider it of value when all data has been assembled in working out a diagnosis.

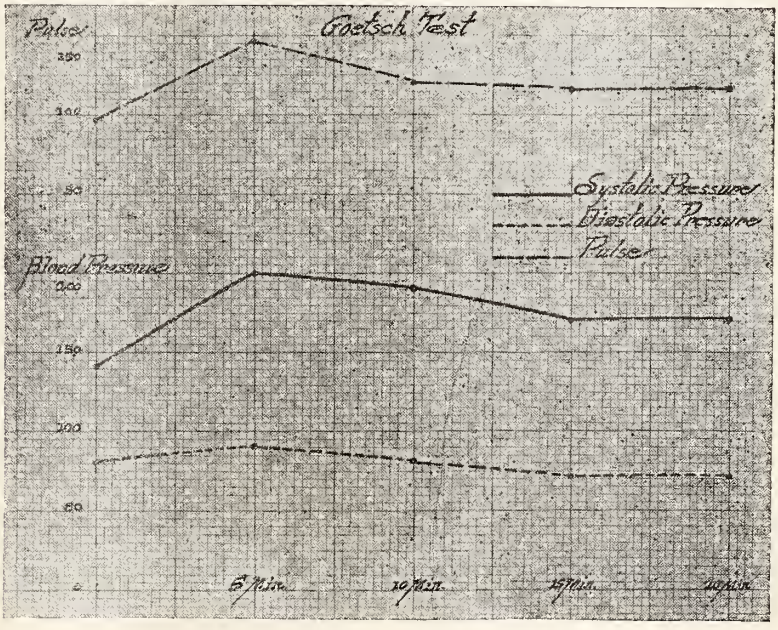
Among the important scientific contributions, and most productive of important results, is the work of Goetsch, reporting in a clear and distinctive way that patients with exopthalmic goitre or thyroid adenoma with thyrotoxicosis are hypersensitive to all forms of stimuli. a result the patient is not properly classified; then, too, a few psychoneurotics give positive tests. Marine and Lenhart noted interesting experiments on animals, comparing the effects of the subcutaneous injection of adrenalin in both normal and thyroidectomized rabbits, also in the same animals before and after the thyroid was removed. A rise of oxygen consumption was noted in every case. Even though this test does not always check with the clinical picture and metabolic rate, and



In the Goetsch test adrenalin is used because the results can be accurately recorded. During the past year we have studied approximately 150 goitre patients with various degrees of over activity. Of the exopthalmic patients 79% gave positive reactions. Of the adenomas not associated with exopthalmus 25% gave a positive sensitization test. Some observers claim that the epinephrin injections may cause dangerous reactions but this has not been the case in our series. It is quite true that in a small number of cases of hyperthyroidism there is no reaction to adrenalin and as occurs in conditions other than hyperthyroidism, still we believe this test is of considerable value in the diagnosis of thyroid diseases.

In connection with the discussion of the Goetsch test it is well to bear in mind the blood picture before and after this test is done. For years it has been known that one of the first blood changes in toxic goitre is an increase in the percentage of lymphocytes. This is not always present, therefore it has been noted that the lymphocyte change in the blood has not proved trustworthy. Crotti and Trott, in their observations upon the

blood change after the subcutaneous injection of epinephrin, as is carried out in the Goetsch adrenalin sensitization test, noted a rise in the leucocyte count and a definite lymphocytosis in toxic individuals. We are running as a routine a white and differential count before, and after, the Goetsch test; and our observations have confirmed those of Trott, and the conclusion has been drawn that in the borderline cases the injection of adrenalin produces the classical



blood picture of an advanced hyperthyroid.

The most accurate method of determining the abnormality of the thyroid function is by estimating the basal metabolism, which is expressed in terms of calories per square meter of body surface per hour. The average output, based on DuBois' formula, is 31.7 for the male and 36.9 for the female. This estimation gives an exact mathematical index to the degree of thyroid activity.

Owing to the extraordinary similarity in symptomatology existing between hyperthyroidism and neurasthenia we are making careful estimation of the basal metabolism in our effort to differentiate these conditions. These studies have enabled us to classify that small percentage of patients with nervous exhaustion, who gave a positive sensitization test, safely as neurasthenics. It is quite true that the neurasthenic is likely to have a slightly increased rate, owing to worry before the test, and restlessness during the test, but it is our routine to repeat, on a subsequent date, all tests with a rate ranging between plus 10 and plue 25 If great care is taken to prevent physiological errors this test is the most accurate of all laboratory examinations used in connection with thyroid disorders.

When all data have been assembled special attention should be paid to the history of rapid onset; nervousness running in a wave like course, the wave topping off into a crisis when all nervous symptoms are exaggerated; loss of weight, with increase in appetite. The mutritional state and the condition of the myocardium must be carefully

studied. Plummer has stated that a pulse of 120, associated with cold, dry hands, is incompatible with hyperthyroidism since a hypersecretion sufficient to produce such an increase in the pulse rate would cause vasodilatation with a warm, moist skin.

After all possible data have been accumulated from the history, clinical course and physical findings, we emphasize the importance of the carbohydrate tolerance test, the Goetsch test, and the estimation of the basal metabolism, in our effort to reduce the margin of error in diagnosis.

Unfortunately, the determination of the operability of exopthalmic goitre or toxic adenoma cannot be accomplished with the same degree of accuracy that the abnormality of the thyroid function is estimated. The factors for consideration in the estimation of the operability of exopthalmic goitre patients are drawn, first, from the history of the patient, that is, symptoms indicative of an unstable organism. Surgery of the thyroid should never be regarded as emergency work, as it is unwise to operate on these patients at the time of great mental depression or about the time of a crisis. Second, the findings at physical examination, especially the condition of the myocardium and the general nervous system should be studied, inasmuch as patients showing marked myocardial insufficiency should be treated medically until they are operable. Third, the clinical course of the patient, with special reference to the temperature, pulse, respiration, blood pressure and weight curves, are factors for consideration as a pulse ranging around 130 with marked loss of weight are contraindications to extensive operative procedures.

We attach considerable importance to the information gained from the results of the laboratory tests. The urine examinations checked by the Mosenthal renal function and the Phenolsulphonephthalein tests are of importance since a kidney lesion so marked as to contraindicate an operation of equal difficulty should not be undertaken.

The determination of the basal metabolic rate does not necessarly indicate the resistance of the patient to operative trauma. A high rate, together with symptoms of marked toxaemia, contraindicate extensive procedures, and is of great value when it is not clear in the surgeon's mind whether a lobectomy or a ligation is indicated. Sistrunk advises against a primary lobectomy in cases with a metabolism around 70%. Cheever states that a metabolism of plus 30 introduces a serious risk, which increases with high rate but not in proportion.

It is well recognized that simple operative procedures, such as the injection of boiling water and ligations, are procedures which not only prepare the patient for future operations by lowering the basal metabolic rate, but are valuable criteria of the operability of exopthalmic goitre patients. These minor procedures test the patient's ability to stand operations of greater magnitude without causing severe post operative reactions. In a critical review of the records of our hyperthyroid patients, operated on during the past five years, we have noted a marked reduction in the mortality rate during the past eighteen months. We are convinced that this reduction in the number of fatalities is due to the fact that we are studying more carefully than ever before the patients' ability to stand operative trauma.

HEREDITY AND ENVIRONMENT

By DR. W. W. BROWN,
Shenendoah Junction, W. Va.

Read before the Eastern Panhandle Medical Society at Harper's Ferry, W. Va., March 16th, 1921.

Studying the life history of his patient, and observing the environment that surrounds him, certainly is within the province and privilege of the well informed doctor. Our discussion, therefore, will be upon this line—and we do not expect to bring out anything new; someone has said that the last word on heredity will not be said for centuries.

The ancients had a great conception of the powers of heredity and environment, but as an experience only, not as a theory.

By heredity we mean the organic tendency for like to produce like; that is, the inheritance of the fundamental qualities of our ancestry, and environment builds upon this superstructure, as environment is the supreme factor in all envolutionary developments.

Heredity as a science can be best defined by what is known as the Mendal theory; that is, if two different species are crossed, the result is a hybrid which combines certain characters of both parents and when this hybrid propagates, its progeny splits into three sets; one resembling the hybrid parent, the other two the original parent. Another fact, when a plant receives identical characters from both parents, that character breeds true, but if the plant receives the character from one parent only, it splits in the next generation. Another theory observed by Mendal, that certain characters are dominant and others recessive. We wonder, in the great cross that took place last fall in the electorate—if the nineteenth amendment can be called a cross—whether the women voters will be dominant or recessive. Many of their leaders say they will be the former. At any rate, we know that women are greater creatures of environment than men.

Whilst a parent is able to transmit like characters, he is also able to transmit unlike characters—what is known as variations: individualism, in fact; as we know, that no two men, no two animals and no two plants are exactly alike. A mother also may transmit characteristics to her son that she does not posses; color blindness, for instance, we note how many men and how few women are color blind.

Heredity does not actually give the grown man his characteristics, it only gives him the power to acquire them. For instance, the son of a soldier is not necessarly a soldier—true he may inherit the fighting instinct of his father, but training and education make him the soldier. Should he, however be a minister of the gospel, the spirit of his Master will lead him "in the ways of pleasantness and the paths of peace"; on the other hand, should he be a country doctor, the association with city doctors and consultations with specialists, might bring out all the latent fighting instinct of his ancestry.

The son of a criminal is no more doomed to be one, than the son of the tubercular is to die of tuberculosis, because his father did. It is the conditions that surround the criminal that make him one. Conditions, we know, also make the saint, as he is not born a saint naturally; the Bible, however, gives several instances of exceptions to this rule. We know that weeds under proper cultivation develop into beautiful and useful plants.

The yield of the harvest depends always upon the character of the seed that is sown. The farmer, for instance, has three ears of corn to select from— the extra large ear that has ripened ahead of its fellows; the "nubbin" that has been cut by the frost; and the mean type of ear. He plants the mean type, as he knows its yield will gladden his heart and fill his purse. The son of the big ear, the genius, will revert to the primitive, the mean type. The son of the "nubbin," the defective, will be a burden on society and a grist to the mill of the alienist and common doctor, whilst the son of the mean type will reflect the glory of his father, add glory to his name and transmit glory to his progeny, and we call him "the salt of the earth."

Is disease inherited? Scarcely so, but the predisposition only. For instance, the syphilitic mother does not transmit the disease; she simply infects her offspring. Syphilis, we know, is due to a specific toxin. I, however, do not want to encroach on the reservation of the Chief of the Venereal Clinic, Dr. F. Even among the insanities, dementia precox, for instance, we find the trouble due to our friend, the microbe, a specific microbe. I think, gentlemen, the deeper and deeper we get into the study of disease the more and more we will be able to trace its course to his Majesty, the Microbe; and the better and better we will be able to dethrone his Majesty and win the fight.

The Bible, in the fifth commandment speaks of God "visiting the iniquity of the fathers upon the children unto the third and fourth generation of them that hate me" which appears to me as an intimation at least, that after the fourth generation the current can be turned; and it further appears to me, if the current is not turned, somebody has blundered — the Church, the State, Society and above all, the Medical profession. We know, at least, that new plants, animals and men can be made almost at will, but it takes about four generations to do it. The typical American is really a new creature—the new Aryan race. As he is a varietal hybrid, not of one blood but the admixture of many—the English, Irish, Scotch, German, Swede, Dutch, Huegenot and other high strains, the English, the dominant type. I think, gentlemen, that the League of Nations will properly function, when we of the United States recognize the fact that the English language, Americanized, will be the prevailing language of the world and that American ideals, Wilsonized, will be the dominant force in the world—seven million majority to the contrary; but six million were votes of Germans, who wanted their language and ideas the dominant factor in the world.

Sometimes it looks as if God is playing favorites with plants, animals and men; or is it only Nature strengthening the fit and removing the unfit. At any rate we are comforted with the fixed and inviolate law; namely, the Mingling of Kindred, yet separate blood of high hype, brings renewed youth, increased vigor and vitality, whilst the crossing of blood widely variant from each other results in deterioration and death; that is, specific hybrids. We, therefore, are convinced that God has given to the European white man, the Anglo-Saxon in particular richer blood and greater capacity for physical, mental and spiritual development, with not only the desire but the power to rule over and govern other races and peoples.

Families and races of men are kept pure through what is termed "natural

selection." A fan tail pigeon, for instance, will not mate with anything but her kind. Recently we hear a good deal about Eugenic Marriages; that is, marriages for the sole purpose of having healthy children, although there is no disposition to prevent the man or woman to be drawn together by the tender passion of love. The girl, certainly, should be accorded the same privilege that the fan tail pigeon claims for herself. Laws have been enacted in some states, requiring a medical health certificate, and I think a bill of that character has been introduced in our State Legislature, which I approve, although I have not seen the bill. Why, however, should we make such strenuous efforts to keep pure the blood of our home stock, when we permit foreigners to come over here, of that class who contaminate our streams with bad blood and morals; and pollute our electorate with bad conceptions of law and government? The League of Nations will function properly and bring about the Millennium, when the United States joins it, providing, she selects a goodly number of her men of science, biologists, naturalists and sociologists, to represent her. Good blood and free environment are essential to the making of a nation.

In conclusion; I would like to state two truths: First, that plants, animals and men will under intense cultivation reach a period of cultural limitation and run out, as examples, the Mercer potato, the Morgan horse and the German Nation. Second, that all things under the process of evolution are pushing upward and forward—from savagery to refinement, from selfishness to the altruistic, from earth to the heavens—and the medical profession has joined the procession.

CASE REPORTS OF INTEREST

HODGKINS DISEASE

By C. J. BROEMAN, M. D.,
Assistant Director of the Department of Dermatology and Syphilis, Cincinnati General Hospital, Dermatologist to St. Mary's Hospital, etc.
Cincinnati, Ohio.

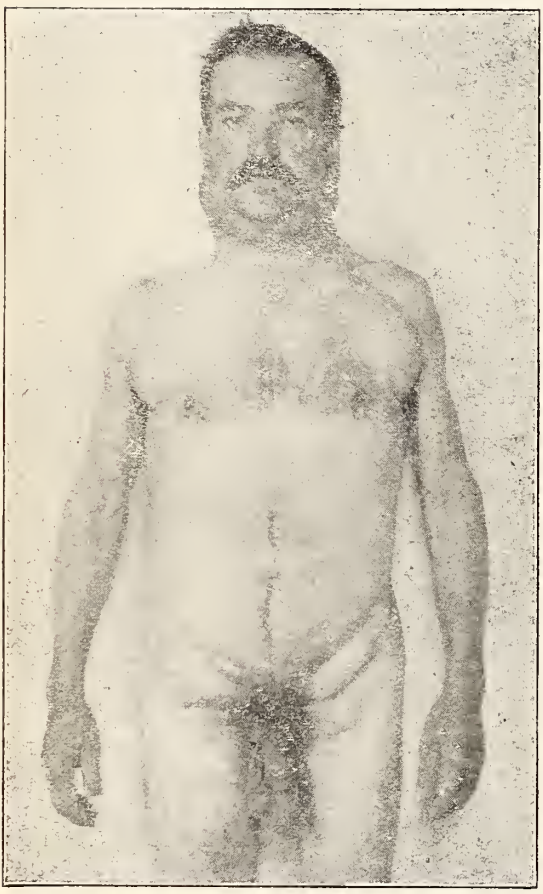
Hodgkins Disease, according to Osler, is "an affection characterized by progressive enlargement of the lymphatic glands, (beginning usually on one side of the neck) and spleen, with the formation in the liver, spleen and other organs of nodular growths, associated with a secondary anemia, without leukaemia."

The exact cause of the disease is unknown; evidence, however, points to an acute infection which gains its entrance to the cervical glands from the nose, mouth, throat or tonsils. That Hodgkin's disease is a peculiar form of lymphatic tuberculosis has been advanced by some authorities. This was not substantiated by the findings in my case, nor in Fox's case. The etiology in the author's case pointed more to an infection following influenza.

Quite frequently the disease is accompanied with cutaneous manifestations. Cole, Fox, Trimble and others have discussed this phase of the subject. Cole, after careful observations, agrees with the statement that one-fourth of all cases of Hodgkin's disease at some time or another in the course of the trouble, showed evidence of skin involvment.

The cutaneous lesions in Fox's case recently reported, consisted of tumor-like infiltrations of portions of the scalp,

forehead and midscapular region. Histologic examination of a tumor from the scalp showed a similar structure to that of the gland. The Dorothy Reed bodies were found in the skin lesions. My case up to the present time has shown no characteristic skin lesions.



Present complaint: 1. Swelling of the glands of the neck, under the arms, at the left elbow joint, and in both inguinal regions.

2. Some difficulty in swallowing.

3. Restlessness and inability to sleep well.

4. Shortness of breath at times.

Detail of above: 1. Glandular swelling. Three months ago this patient first noticed an enlargement of one gland under the mandible on the left. About every week or ten days following this he began to have another glandular involvment. After several of the lateral and postero-cervical glands had become enlarged, the axillary gland became swollen, then the right inguinal followed by the left inguinal glands and finally the left epitrochlear gland became involved. During all this time his neck had steadily become larger.

2. Difficulty in swallowing. In August this patient had an attack of tonsilitis and since that time he has had some trouble in swallowing.

3. Restlessness and inability to sleep. The patient states that previous to the beginning of this trouble he had not slept well. For the past two weeks he had slept less and less.

4. Shortness of breath at times: Lately he has been breathing through his mouth when he sleeps. His mouth becomes dry and phlegm sticks in his throat, which necessitates that he sit up in bed to breathe properly.

Personal history: This patient was born in Germany in 1881. At the age of three he came to the United States and was brought up on a farm. At the age of sixteen he began to work in Cincinnati, where he worked for twenty years. He had always been in good health until recently. For the past four years he has been farming in Kentucky. During the last seven or eight weeks he has noticed a feeling of weakness in his legs, and has had to rest considerably during his days work. He has weighed about 200 most of the time spent in Kentucky. In March he weighed 192, and on November 11, he weighed 175.

Previous illnesses: In his childhood he had the measles and a few colds. Six years ago he had an attack of pleurisy. In March of this year he was sick with the influenza and was in bed only three

days. In August he had a severe attack of tonsilitis. He has had no operations or serious accidents.

Family history: Marries sixteen years. One child was born dead fourteen years ago. His wife is now living and well. His father died from dropsy. His mother is living and well. Four brothers and two sisters are living and well. Three died before he was born. There is no history of tuberculosis, cancer or nervousness in the family.

Habits: This man has always worked hard. He chews heavily and smokes very little. His appetite is good, but his bowels move poorly and he has had trouble in sleeping lately.

Venerel: He denies ever having had any infection.

Examination of the lymphatic glands: This shows an enormous enlargement of the lateral and posterior cervicals, axillary, left epitrochlear and inguinal glands. They are firm and painless, the overlaying skin being normal in appearance and not adherent. The glands are, for the most part, en masse. The largest gland is the one in the right submaxillary region.

Physical examination—General: This man is of a rather heavy build and of medium height. He rests quietly in bed when propped up with a back rest, coughs frequently and does not have the expression of a patient in acute pain. There is considerable edema of the upper eyelids but no ptosis. There appears to be some cyanosis about the mucous membranes and fingers. The veins of his head and neck are prominent. Those of his arms and legs are very loose, and are varicose in character.

Head: Cranium and scalp: There are no scars, deformities or tender areas.

Face: Is apparently symmetrical.

Eyes: Edema of the eyelids is present, especially of the upper lids. The pupils are equal, regular and react to light and accommodation.

Ears: Normal.

Nose: Polypoid degeneration of the left middle turbinate. The right side of the nose is good.

Mouth: Nothing abnormal about the breath. The tongue is red and heavily furred. The teeth are in poor condition. There are seven in lower jaw, discolored and apparently carious. The jaw has five scattered teeth and are in very bad condition. There is evidence of pyorrhea of the gums. The tonsils are unusually large, extending deep into the throat. There is a roughened area over the right tonsil, which does not bleed easily upon irritation.

Neck: There is limitation of motion of the neck because of the glandular swelling. The thyroid is apparently not

enlarged. All lymph glands of the neck are enormously swollen, quite firm, and, in general, massed togeather.

Chest Is that of a large muscular man. The chest is symmetrical, with good expansion.

Lungs: Posterorly, on percussion, the lungs are normally resonant. There is an expansion of 6 cm. and no evidence of fluid in the chest or consolidation. The ratio of inspiration to expiration is 3:1. Anteriorly, the lungs are normally resonant. The breath, whispered and voice sounds are not accentuated.

Heart: There is no bulging, retraction, visible pulsations or thrills. The apex beat, although not visible, is in the fifth interspace, 1½ cm. within the nipple line and normal force. Relative areas of the cardiac dullness are: Right border is 2 cm. from the mid-stream; left border is 11 cm. from the mid-stream; tranverse diameter is 13 cm. The left border is about 2 cm. within the nipple line. The rhythm is regular. There are no murmurs. The sounds are normal, both tones being heard well at the valvular areas. The pulses are equal, strong, full and regular. There is some supra and infraclavicular retraction.

Abdomen: There is a moderate amount of distension of the abdomen, which is soft and does not bulge in the flanks. There is no tenderness or rigidity. There is considerable miliary pigmentation of the lower abdomen and thighs, which the patient states, is due sweating. Stomach: Apparently normal.

Liver: The upper border is percussed at the fifth rib anteriorly, the lower border about three fingers' breaths below the costal margin.

Spleen: The spleen is apparently enormously enlarged, extending four finger breadths below the costal border in the left median clavicular line. The percussion over the organ is not dull as one would expect to find over an enlarged spleen. The enlargement is sharp rather than rounded; spleen notch can not be palpated.

Genito-urinary: The external genital is normal. The prostate gland is enlarged and soft, but not tender.

Nervous: The mentality is good, the reflexes are all normal.

X-ray report (November 19,1920): Stereograph of chest shows no evidence of gross lung change. There is a marked increase in hila shadows on both sides, suggesting a glandular enlargement. The mediastinal shadow is slightly wide and more dense than normally seen, suggesting glandular enlargement in this region. Heart and aorta shadows are shown to be normal in position and size.

Urinalysis (November 20, 1920): Negative.

Laboratory report (November 16, 1920): Wassermann test negative. Specimen of throat showed streptococci, staphylocci and bacilli; nothing which resembled diptheria.

Blood count on admittance (November 15, 1920): White count, 8,000; red count, 5,720,000; hemoglobin, 80 per cent; polymorphs, 20 per cent; large lymphs, 46 per cent; small lymphs, 14 per cent; eosinophiles, 6 per cent; transitional, 14 per cent.

Blood count November 11, 1920: White count 7,000; red count, 3,850,000; hemoglobin, 75 per cent; large lymphs, 63 per cent; polymorphs, 7 per cent; small lymphs, 20 per cent; eosinophiles, 5 per cent; transitional, 6 per cent; mast cells, 1 per cent.

It is interesting to compare the above report with the case recently published by Fox, in which his patient's blood examination showed: White cells, 6,600; red cells, 5, 664,000; hemoglobin, 75 per

cent; polymorphs, 68 per cent; small mononuclears, 27 per cent; large mononuclears, 2 per cent; eosinophiles, 1 per cent; basophiles, 0 per cent; transtionals, 2 per cent.

Treatments: Neo-arsphenamine, 0.9 grams, was given intravenously once a week, for five doses. X-ray treatments to the enlarged glands, spleen, etc., were given every ten days, and he received in all five X-ray treatments.

On January 10, 1921, the patient was again presented before the Academy of Medicine showing distinct signs of improvement. He felt and looked a great deal better. The glands were markedly reduced over the entire body. His appetite is better and all in all he is at present very much better than when he entered the hospital about two months ago.

Note—I wish to express my thanks to Dr. Mills, interne on the service, for the blood work and careful record of the case.

REFERENCES

1. Case presented before the Cincinnati Academy of Medicine, November 15, 1921, from the Department of Dermatology and Syphilis of the Cincinnati General Hospital, Medical department of the University of Cincinnati Patient reported by the courtesy of Dr. E. Tauber, director of the department.

2. Osler: Practice of Medicine.

3. Cole: H. N.: The Cutaneous Manifestations of Hodgkin's Disease: Lymphogranulomotasis J. A. M. A., 69:-341 (August4), 1917.

4. Fox, Howard: Lymphogranulomatosis of the Skin in Hodgkin's Disease: Archives of Dermatology and Syphilology, p. 578, November, 1920.

A RARE FORM OF LUES OF THE CHEEK

Miss M. C. age, forty-six, was referred to me by Dr. J. E. Brown, on December 9, for diagnosis and possible radium treatment.

Chief complaint: Large swelling on right side of face.

Family history as follows: Mother dies at the age of eighty-five. Father died at the age of forty, cause unknown. The girl was the last child born, and is the patient just presented. Four boys died in early infancy. One boy died of apoplexy at the age of fifty-two. One boy died in the insane asylum at the age of fifty. One died of a complication of diseases at the age of fifty.

Patient's previous history: Born when mother was forty-five years of age, and was the youngest child. Had measles, scarlet fever and whooping-cough. When five years of age had ulceration of the left side of the neck, that lasted for a number of years. This disease was probably broken down tuberculous glands, as the present scar is characteristic of such a condition. Three years ago the patient had an ulceration over the right sterno-clavicular point. It lasted for two months, but healed by using a home remedy.

Examination at present shows a distinct irregular depressed scar about the size of a half dollar. The scar is adherent to the sternum, and one is justified in thinking the patient had a periosteal gumma at this time. Patient denies ever having had any venereal disease.

Before taking up the history of the chief complaint I wish to say that the general physical condition of patient is negative as far as her present trouble is concerned, and she has not lost any appreciable weight.

Present trouble: The large mass in the right side of the face began as a small nodule over the ramus of the right lower jaw, about eight months ago.

About a month previous to this time patient said she had trouble with her teeth. She also states that the mass becomes larger at times, and is painless. Examination shows a large mass about three inches in length by two inches in width involving the entire right cheek. Mass is quite hard and not movable, and there is no apparent discoloring of the skin. I would judge the infiltration to be from one to two inches deep. Antrum shown to be clear by transillumination. Second cervical glandular enlargement cannot be palpated. Various salves and liniments have been used locally on the advice of different physicians, but never has had any internal treatment for the growth. Has been examined by six different physicians and two X-ray photographs made.

Since I did not have access to her previous X-ray plates, I sent her to Dr. Goosman for an X-ray examination.

The following is a report of the plates made by Dr. C. Goosman: The plates of Miss M. C. show no X-ray evidence of bone injury or bone disease. There is pyorrheal resorption in the right upper molar region, and less marked on the right lower molars. The root fragment and crowned tooth in the right upper jaw are suspicious, but films would be necessary to show definite evidence of abscess.

As it was quite evident from Dr. Goosman's report, and from a casual examination of the teeth, that they needed attention, I sent her to Dr. Dalton, who reported the following: "Enclosed please find radiographs made for your patient, Miss M. C. Examination shows areas of rarefaction about the apices of the root of the right upper first and second bicuspids, more especially marked about the second bicuspid root. Apparently there is antrum communication with this root. All of the other teeth show a negative reading.

Later, Dr. Dalton extracted the right upper first and second bicuspids and thoroughly curetted the sockets, removing a large granuloma from the second bicuspid socket.

Without any suspicion whatsoever as to the condition being due to lues, the blood of the patient—merely as a routine measure before beginning any treatment —was sent to three different laboratories for examination.

Laboratory A: Reported Wasserman four plus, Hecht-Weinberg strongly positive.

Laboratory B: Reported alcoholic antigen four plus positive; cholesternized antigen four plus positive.

Laboratory C: Reported alcoholic antigen four plus positive; cholesternized antigen four plus positive.

Differential diagnosis: (1) The X-ray plates show that there is no bony change so we can rule out any tumor or cyst, starting from the jaw bones. Antrum is clear.

(2) The mass is not due to an infection from teeth, as shown by X-ray plates and this is also the opinion of Dr. Dalton.

(3) Is it sarcoma? No pain, no glandular enlargement, no loss of weight, no bony involvment, etc., hardly a malignant disease.

(4) Is it a gumma? If it is, in eight months time there should be some signs of softening, and there should be some pain at night.

Taking all things into consideration I am inclined to believe that we have an unusual form of luetic infiltration of the soft tissues of the right cheek. Whether we have a case of acquired or congenital syphilis is hard to say. The

evidence the history of a probable gumma of the sterno-clavicular joint, three years ago, would, in my opinion, point to the acquired form of the disease.

In conclusion, I wish to say that the patient will be treated with anti-syphilitic remedies till her serological test is negative, and furthermore, she will receive at least one more year of intermittent treatment after the test is negative, since only by this method can we ever hope to cure the disease.

Note—January 26, 1921, patient has had weekly deep intramuscular injection of gray oil, also one intravenous injection of neo-arsphenamine, dose 0.9 grams every two weeks by gravity method. Potassi iodide 10 to 40 drops three times a day every other week. Patient today looks better and says she feels better than she has for a long time. Thinks she is cured. Careful examination fails to show very little if any difference in the two cheeks at the present time.

Announcements and Communications

Huntington, W. Va., April 23.

Governor E. F. Morgan will next week call attention to some public way to observance in West Virginia of National Hospital Day, May 12, bringing out to the fact that this state is fifty percent short of normal requirements of well-trained nurses, according to word officially conveyed to Dr. J. A. Guthrie, state chairman.

Dr. Guthrie who, at the behest of national authorities is inaugurating a statewide campaign, asks all hospitals and co-operative organizations in West Virginia to share in the movement to have a "day" for the 8,000 hospitals caring for 3,000,000 people sick every day.

"That the community may know its hospital" is the slogan for National Hospital Day, which also commemorates the birth of Florence Nightingale, pioneer in modern hospital and nursing methods. Aid of the mayors of various cities, the American Legion, churches, theatres, schools, merchants and public spirited citizens everywhere is expected to be enlisted for the event. Inspection of various hospitals by committees of citizens representing leading civic organizations, special programs in the hospitals, social events, distribution of literature telling of hospital improvements, newspaper articles, and other modes of advertisement intended to attract to the hospitals girls who could enter into training to become nurses, and generally emphasize the bettered status of hospitals generally throughout West Virginia, are some of the suggested campaign methods.

"I am sure West Virginians will not be insensible to the appeal governor Morgan will make on behalf of our hospitals," declared Chairman Guthrie today. "All will readily realize the urgency for bringing the quota of trained nurses up to normal requirements. Those who are familiar with the splendid development of hospitals in West Virginia will be eager to bring these merits to the attention of the public generally. Much has been done to eradicate the sentiment that hospitals are places of "last resort" for persons desperately ill. The hospitals are for the sick of all varieties and classes. West Virginia hospitals, or at least a great number of them, now have facilities and specialists to rank with the best of the nation, and we ought not to be backward in calling attention to these assets. It ought to be made clear that hospitals are centres for the dissemination of information on

public health work and hygiene. We are planning to have public inspections of hospitals, distribution of pamplets describing hospital work, talks by men prominent in the medical profession in the high schools, and other efforts which I believe, with a proper measure of co-operation, will put West Virginia on the map as far as National Hospital Day is concerned. As state chairman, I expect to ask every mayor in West Virginia to issue a statement calling attention to the day, following the commendable lead of Governor Morgan."

DR. J. A. GUTHRIE, W. VA.
State Chairman for West Virginia, for the Observance of National Hospital Day, May 12.

THE BOSTON SESSION

IDENTIFICATION CERTIFICATES REQUIRED FOR SPECIAL RAILROAD RATES

Members, who desire to take advantage of special railroad fares announced in THE JOURNAL, March 12 and 19 and April 9, should make request for Identification Certificates—accompanied by an addressed, stamped envelop — to the Secretary of the Association, Dr. Alexander R. Craig, 535 North Dearborn Street, Chicago.

These Identification Certificates are now ready for distribution and they should be secured as early as possible by members who plan to go to Boston. The special railroad fares which have been announced can be secured only on the presentation of these Identification Certificates.

AN ALL DAY TRIP TO PLYMOUTH ON SATURDAY FOLLOWING THE SCIENTIFIC ASSEMBLY

The Local Committee of Arrangements for the Boston Session is planning what will be a fitting climax for the Session—an all day trip to Plymouth by boat, with a band and other features to make this an attractive outing. This year many will wish to visit Plymouth as it is the celebration of the Three Hundredth Anniversary of the landing of the Mayflower which in addition to the band of pilgrims brought a cargo of spinning wheels, four-poster beds and cradles, some of which will be on exhibition in Plymouth Hall.

The party will leave Boston from under the shadow of the Old North Church early on the morning of Saturday, June 11, for a three-hour sail down the Harbor and Massachusetts Bay. At Plymouth luncheon will be served outdoors. There will be guides who will show the visitors the different sights which have been made famous by Miles Standish, John Alden and others whose names are familiar to all Americans. The Ter-Centennial Committee will have restored Plymouth Rock to its original position long before the time set for this excursion.

This trip will afford an excellent opportunity to see the South Shore on the way down and back. A charge of five dollars will be made which will include the midday luncheon and the boat fare.

THE SCIENTIFIC EXHIBIT

The Scientific Exhibit at the Boston Session will be located in the large galleries on the second floor of Mechanics Hall. Opening from these galleries are three of the section meeting halls, as well as the hall which will be used for the moving picture theater. This arrangement makes the Scientific Exhibit convenient of access to all those in attendance. The floor space and wall space provided are ample. Applications are now coming in, asking for reservations.

Space will be assigned about May 1, and each applicant notified of the space assigned to him. Any one desiring space for an exhibit or an assignment of time on the moving picture theater program should make application before that date. No applications can be considered after May 1. Address Director of Scientific Exhibit, 535 North Dearborn Street, Chicago.

—*Jour. A. M. A.*

CHARLESTON HOTELS

All conducted on European plan.

Holley, 100 rooms; rates $1.50 to $3.00 per day. Fifty rooms reserved for the Society.

Kanawha, 165 rooms; rates $2.00 to $7.00 per day. Fifty rooms reserved for the Society.

Ruffner, 172 rooms; rates $2.00 to $5.00 per day.

Fleetwood, 132 rooms; rates $1.25 to $3.00 per day. Twenty-five rooms reserved for the Society.

Peyton, 50 rooms; rates $1.50 to $2.50 per day.

Lincoln, 55 rooms; rates $1.50 to $4.00 per day.

Jefferson, 56 rooms; rates $1.00 to $2.50 per day.

Elk, 76 rooms; rates $1.00 to $3.00 per day. Twenty reserved fo rthe Association.

Washington, 35 rooms; rates $1.00 to $2.00 per day. Ten reservations for the Society.

The Y. W. C. A. serves excellent dinners at noon at a very reasonable price. There are also three excellent caffaterias serving all meals at reasonable rates. The dining rooms of the hotels are all good.

THE ANNUAL MEETING

One has but to go over the program, as prepared by President Anderson and Secretary Ashworth, which appears in this issue, to feel assured that this years meeting is to be a wonderful one.

The standard of the scientific essays presented at the annual meetings of the West Virginia Medical Association has always been of a high order. As outlined for our gathering in Charleston the present meeting will maintain this high level.

Your attention is also called to the list of hotels in the city and their rates. This appears under Announcements and Communications. It is advised that you immediately secure your reservations.

Our Charleston members are making great preparations for our entertainment, and the efforts of the Kanawha County Society have always been productive of happy results in entertainment.

Be sure to come.

American College of Surgeons. The West Virginia Section.

April 18th and 19th will go into the records of West Virginia medical history as marking the first annual session of the above body.

It is to be regretted that all of the men in the state could not have been present. The outline of the meeting as it appeared in the printed program showed that much of surpassingly great interest to the surgical men of the state would be provided.

So far your Editor has not been able to get a report of this meeting which was held in Wheeling, for publication in The Journal. It is to be hoped that it will be in our hands in time for the June issue.

The West Virginia Medical Journal

JAS. R. BLOSS, M. D., Editor
C. R. ENSLOW, M. D.
J. E. RADER, M. D. Assistant Editors

Huntington, W. Va., May, 1921

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Single Copies - - - - - - 30 Cents

All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: 804 Lincoln Place, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

OFFICERS OF THE STATE ASSOCIATION

PRESIDENT—J. Howard Anderson, Marytown.

FIRST VICE-PRESIDENT—H. E. Gaynor, Parkersburg.

SECOND VICE-PRESIDENT—S. G. Moore, Elkins.

THIRD VICE-PRESIDENT — Charles O'Grady, Charleston.

SECRETARY—Robert A. Ashworth, Moundsville.

TREASURER—Hugh G. Nicholson, Charleston.

DELEGATE TO A. M. A. 1920-1921—H. P. Linz, Wheeling; Alternate, J. E. Cannaday, Charleston.

DELEGATE TO A. M. A. 1921-1922—Jas. R. Bloss, Huntington; Alternate, W. W. Golden, Elkins.

COUNCIL

FIRST DISTRICT—C. G. Morgan, Moundsville, one-year term; H. P. Linz, Wheeling, two-year term.

SECOND DISTRICT—J. C. Irons, Dartmoor, one-year term; C. H. Maxwell, Morgantown, two-year term.

THIRD DISTRICT—C. R. Ogden, Clarksburg, one-year term; L. H. Forman, Buckhannon, two-year term.

FOURTH DISTRICT—G. D. Jeffers, Parkersburg, one-year term; W. S. Link, Parkersburg, two-year term.

FIFTH DISTRICT—J. E. McDonald, Logan, one-year term; E. H. Thompson, Bluefield, two-year term.

SIXTH DISTRICT—R. H. Dunn, Charleston, one-year term; J. W. Moore, Charleston, two-year term.

"HOW MAKE THE COUNTY MEDICAL SOCIETY HELPFUL"

You will find Dr. Irons' paper dealing with this subject in another portion of THE JOURNAL.

This seems to be a particularly appropriate time to consider this matter. The annual meetings of the State Association provide the only time during the year when all of the officers of this body can get together and take up matters of policy in the sessions of the Council and House of Delegates.

There has been a constant growth in the interest and enthusiasim shown in the annual meetings during the sixteen years I have been a member. Each year the papers and addresses have shown that "our men" have been keeping abreast of those of any other locality. This is as it should be and we feel a very great pride in the marked ability of our friends throughout the state. We will back them to give good account of themselves with those of any state.

But what are our local societies doing? This matter of making the county units to be what they should be. To have them the real meeting place for the physicians of their sections where

all the perplexing cases may be discussed; where their professional worries and cases may be brought to their professional brothers for help. It is this that we fear is not realizing to the fullest extent the value of the organization as it should.

There are none of us who can afford to stay away from the meetings. It is true that many times we are unavoidedly absent, and there are some who habitually stay away for one reason or another. This is selfish for even if they can learn nothing from the poor efforts of those who do go and who do try and who do write papers, they can by their friendly criticism or discussion of the essays or case reports, teach something to the others of us from their boundless experience and wisdom. It is to be hoped that each of the whole membership will read this paper and then come to Charleston with some plan to propose by which we can create more enthusiasm in our County Societies when we return to our homes.

AMERICAN SOCIETY FOR THE CONTROL OF CANCER

It is feared that in the rush of our work we have been somewhat overlooking the very great importance of this society's work in the United States.

The literature sent out is of surpassing interest and the statistics together with the other information represent the very latest word upon all matters dealing with the cancer question from all angles imaginable.

This surely is a matter in which our profession should take the lead. The County Societies should take up this question and organize for meetings with various civic organizations — Rotary, Kiwanis and Women's Clubs, Church gatherings—for the purpose of giving correct information to the laity concerning this dread disease.

The last bulletin of this Society gives much praise to the Chairman of the West Virginia Committee, Dr. Hupp and to his Sub-Chairmen, Drs. Cannaday, of Charleston, Ogden of Clarksburg, Hunter of Huntington and St. Clair of Bluefield for their efforts, and especially speaks of Dr. Harriet Jones' efforts in connection with her work as lecturer for the West Virginia Tuberculosis Association.

This is a matter for the State Association to take cognizance of at the coming meeting.

WEST VIRGINIA ADOPTS MODEL LAW

Last week THE JOURNAL announced the passage of the model bill for the registration of births and deaths in Iowa. This week it is a pleasure to record the passage of the bill in West Virginia. Congratulations are due the officials of the state department of health for the constant work for the education of the public and for the stimulation of interest in this measure which has been carried on for the last two years. The passage of the bill by a vote of 65 to 14 in the lower house and by a unanimous vote in the senate is again proof of the fact that satisfactory public health legislation of any kind can be secured only after a lengthy campaign of public education. West Virginia is the forty-fifth state to adopt this law. It remains only for Arizona, Nevada and South Dakota to get in line with the other states to give this country what it has not had: Complete and uniform registration of births and deaths.

— *Jour. A. M. A.*

State News

Dr. J. E. Hubbard, of Huntington, spent two weeks in New York and Baltimore in April attending radium clinics—DR. Hubbard was accompanied by his wife.

Dr. C. C. Johnson, formerly located at Darke, is now at Bolivar.

The June issue of the MEDICAL REVIEW OF REVIEWS will be a special radium number dedicated to Mme. Curie. The issue will consist exclusively of articles on radium and its uses, written by the most prominent radiologists in the United States and Canada.

Copies will be sent complimentary to every physician interested in the uses of radium and any readers of this item who desire that issue may have it by asking for it from the MEDICAL REVIEW OF REVIEWS, 51 East 59th Street, New York.

Dr. J. Howard Anderson, of Marytown, President of the West Virginia State Medical Association, was a visitor in Huntington in April.

Dr. Carl W. Sawyer, of the Sawyer Sanitarium at Marion, Ohio, visited the Marshall County Medical Society at Moundsville recently and presented a paper on "Some Primary Factors in the Treatment of Mental Diseases.

Dr. Chas. F. Hicks, of the Miners Hospital at Welch, was in Huntington recently.

Dr. Robert W. Fisher, formerly located at Morgantown, W. Va., has gone to Atlantic City, New Jersey.

Dr. L. J. Marshall, formerly of Dayton, Va., is now located at Davis, W. Va.

Miss Frippo, of Richmond, Va., has recently accepted the position of Superintendent of nurses at the C. & O. Hospital at Huntington.

Plans are under way for a miners' hospital to be built at Charleston, W. Va., at a cost of $500,000, work on the structure to be commenced as soon as contracts are awarded. Financing the project will be in the hands of some 20,000 union miners who, by referendum vote, have agreed to a monthly assessment of $1 each until the building is paid for, and to a smaller monthly assessment for maintenance after it is opened.

TRAINING CAMP FOR MEDICAL STUDENTS

Plans are being outlined by the Surgeon-General of the Army for the summer training camp for members of the Reserve Officers' Training Corps. The camp will be located at Carlisle Barracks and will be operated by the Medical Department in connection with its Medical Field Service School. It is expected that 150 medical, dental and veterinary students will attend. The course will begin June 6 and end July 16. Medical students, who have taken the Reserve Officers' Training Corps courses at various universities of the country, will make up the personnel of the camp.

THE AMERICAN PROCTOLOGIC SOCIETY

Is to hold its annual meeting in Boston, Mass., June 3, 4 and 6, with headquarters at Hotel Braemore. Sessions of the society will be held in the Boston Medical Library.

THE AMERICAN ASSOCIATION OF ANESTHETISTS

Will hold its ninth annual meeting at the Hotel Bellevue, Boston, June 6 and 7, the first two days of A. M. A. week.

Dr. J. Ross Hunter, of Huntington attended the First Annual Session of the West Virginia Section of American College of Surgeons held in Wheeling, April 18 and 19.

May the 12th has been selected for National Hospital Day. Every hospital and hospital organization in the United States and Canada is cordially invited to co-operate in this movement. The main idea, however, is to make the public better acquainted with its hospitals.

The American Medical Directory, 7th. edition 1921, is now for sale through the A. M. A. It contains 2460 pages; price $15.00.

A copy of the February, 1921 issue of THE JOURNAL is wanted. Please send same to Editor.

Dennis M. Cutright, Adrian, W. Va.; American Eclectic Medical College, Cincinnati, 1896; aged 54; a member of the West Virginia State Medical Association; died, March 29, from mastoiditis.

Dr. J. A. Guthrie, of Huntington, has been appointed State Chairman for West Virginia for the observance of National Hospital Day, May 12.

RECIPROCITY

BY ADDIE READE

There once was a doctor who wanted to buy
Some special particular office supply.
He looked through the ads this month's P. M. J.
But could not find mentioned there, to his dismay,
The article wanted, in all of the pages.
Said he "That darned Editor don't earn his wages!
I'll admit it's the first time I've e'er read an ad
But I don't see how that would affect it, by Gad!"

Now this is the moral of my little tale:
If forsooth you're not anxious to part with your kale,
Read the ads every month and patronize too
The man who is willing to patronize you.

Penn. Med. Journal

Society Proceedings

A regular meeting of the Cabell Co. Medical Society was called to order by the President, at 8:30 p. m., April 14th, 1921, at the Hotel Frederick.

The minutes of the previous meeting were read and approved as they stood.

Dr. H. D. Hatfield presented an essay on "Fractures" dwelling especially on their treatments. He favored in general the open operation for fractures, basing his conclusion on practical experience. Following the paper some excellent X-ray plates were shown.

Discussions: Drs. Wilkinson, J. Ross Hunter, Cronin, Fitch, Hicks, Strange, Howard, Kessler, Rader, Bloss, Yost and Hatfield.

Following the scientific program there being no further business the Society adjourned to the Dutch room where an enjoyable buffet luncheon was served.

Number present 42.

F. C. HODGES,
Secretary.

Bluefield, W. Va.,
March 24, 1921.

The Mercer County Medical Society held its regular monthly meeting in the Chamber of Commerce room, and was called to order by the president at 8:00 o'clock p. m. promptly.

The secretary being unavoidably detained Dr. Hare was asked to act as secretary pro tem.

Dr. W. H. St. Clair read us an instructive paper on "Control of Cancer," which was discussed freely by Dr. Rogers and others. In closing this paper Dr. St. Clair recommended that we hold a meeting at some future time, invite the different organizations of this city and other nearby towns, such as the Rotary Club, Kiwanis Club, Chamber of Commerce, City Council, Civic Club, and labor organizations, to meet with us and have the subject of cancer discussed freely.

The president instructed Dr. W. H. St. Clair to arrange for such a meeting and have some noted cancer physician or good talker to be the chief speaker of the meeting and have this vital question placed before the public in a very impressive manner, also to give out articles to the different newspapers, that the public in general might be enlightened on this most dreaded disease.

Dr. G. L. Todd being absent, "Cancer of the Breast" was not discussed.

Dr. C. M. Scott discussed briefly "Cancer of the Stomach and Uterus," and exhibited a cancer of the stomach he had recently removed from one of his patients. This was ably discussed by Drs. Vass, W. H. St. Clair and others.

Dr. Kirk's paper on "Cancer of the Skin" was postponed until the next meeting.

Dr. W. H. Wallingford read a very complete paper on "Caerarean Section," and reported some twelve or fifteen remarkable cases he had had with extremely good results. This was discussed by Drs. W. H. St. Clair, Hare Rogers, and Clements. Dr. Bird reported two cases of placenta previa.

The secretary having come in during the progress of the meeting, his report of the last meeting was read and approved.

The president being called out, the vice-president, Dr. Kirk, took the chair and presided the rest of the evening.

Drs. Hoge and Hare were appointed to get up a roster of the honorary members.

There were eighteen members and one visitor, Dr. King, of Arkansas, present.

The program for the June meeting was read as follows:

Dr. Thos. E. Peery,
Dr. H. C. Hays,
Dr. C. T. St. Clair,
Dr. J. R. Vermillion,
Dr. A. D. Wood,
Dr. D. H. Thornton.

Nothing further, the Society adjourned at 10:15 p. m.

Don't forget the State Society meets at Charleston, W. Va., May 24th, 25th and 26th.

H. G. STEELE,
Secretary.

Medicine

METABOLISM IN PELLAGRA

Dr. M. X. Sullivan and associates, Pellagra Hospital, United States Public Health Service, Spartanburg, S. C., have made a careful study of Metabolism in Pellagra and report their findings in "Archives of Internal Medicine" for April. The following is a summary of their conclusions:

1. The mineral metabolism seemed to be abnormal especially in the actively pellagrous stage as witnessed by the low P.-205 excretion despite the fact that the diet taken at the time was a generous one with abundance of milk.

2. Indications were present of a heightened putrefactive process in the intestines. (Indicanuria was present in 100% of their cases.)

3. The presence of casts or albumin, or both casts and albumin, in the urine gave evidence of more or less kidney change in about 50 percent of the cases. Marked pellagra can occur with no evidence of kidney change.

4. There was low excretion of total nitrogen and the ordinary urinary ingredients.

5. The urea ratio, in general, was low, and in certain cases with fair total nitrogen the urea ratio was lower than should be expected—a finding which suggests liver insufficiency.

6. There was a heightened ratio for ammonia nitrogen and undetermined nitrogen.

7. The metabolic level during the active stage of the disease was low as further shown by the low excretion of uric acid and creatinin.

8. The creatinin co-efficient was much below normal.

9. The utilization of protein was found to be subnormal, even after several weeks of remedial diet.

10. With at least a month on the curative diet, the urinary ingredients rose to approximately normal amounts, the urea ratio rose to normal and the ammonia ratio fell to normal.

11. As suggested by Goldberger, Wheeler and Sydenstricker, the disease may be differentiated into at least two types: (1) a type with marked skin symptoms but with little physical degeneration; and (2) a type with slight skin symptoms but with profound systemic involvment. The abnormality in the urinary findings was greater for the systemic type than for dermal type.

W. E. V.

Dr. Frank D. Gorham, writing in the "Archives of Internal Medicine," gives the result of his own experiments and reviews the literature on fractional gastric analysis and the acid concentration off different portions of gastric chyme. He finds that fractional gastric analysis of 10 c. c. portions of chyme, aspirated in rapid succession, at times show as much variation in total acidity as those withdrawn at definite stated intervals, and concludes from this that the only acid determination of value is that of the whole contents, and that the stomach should emptied entirely when an acid computation is to be done.

W. E. V.

Surgery

AN ANALYSIS OF THE SIGNS AND SYMPTOMS OF EARLY ECTOPIC PREGNANCY

(*Am. J. Obst.*, 1919 lxxx, 17.)

More attention should be given the early cases of unruptured ectopic pregnancy. In most textbooks now used so much emphasis is placed upon advanced and critical cases that the student does not suspect ectopic pregnancy except in the usual or exaggerated case. Unless a woman is in imminent danger of losing her life the possibility of ectopic pregnancy is very apt not to be considered.

To emphasize the severity of the pain as the significant feature is like dwelling upon the emaciation in cancer of the uterus. To await it in an otherwise

clear case is to court disaster. Every patient presenting herself with the suspicious symptoms of a threatened, imminent, or incomplete abortion should be examined with the possibility in mind that the condition may be ectopic pregnancy, more especially if the cramps are located in the side of the pelvis instead of over the uterus.

Another point which is over-emphasized is the passage of a cast of the uterus or of smaller portions of the decidua.

Great care is taken to teach that the uterus enlarges in ectopic pregnancy. Taking cases as they come, operation reveals some enlargement of the uterus in a considerable percentage but a large number show no appreciable increase in size and indeed frequently the uterus is smaller than normal, since when the uterus and tubes are undeveloped pregnancy is especially apt to be ectopic if it occurs at all.

Extra-uterine pregnancy is said to produce an enlargement of the appendages which may be felt at the side of the uterus. Such an enlargement may be found if the pregnancy has existed long enough to produce palpable swelling, but frequently rupture occurs before that time. The failure to palpate a supposed gestation sac in a case of shock and pain should deter us from operating upon an otherwise clear case of ectopic pregnancy.

The symptoms of a ruptured tube are also too encyclopedically portrayed. The evidence of rupture is given as extreme pain of a tearing or stabbing character, followed by shock, pallor, cold sweat, weakness, nervousness, increased pulse rate, increased respiration, falling of the haemoglobin and red-cell count, air hunger, dullness of the flanks, and distention of the abdomen.

Not sufficient emphasis is placed upon the fact that the severity of the symptoms depends upon the amount of blood lost, not merely upon the rupture of the tube. If only small vessels have been torn, or if the tear is incomplete, the patient will have sudden pain, not neccessarily prostrating, followed perhaps by some nausea and weakness.

The condition of any woman of obstetrical age who is seized with an abdominal pain of severity followed by shock or syncope, even if transient, must be regarded as possibly due to ectopic pregnancy until proved otherwise.

A leukocytosis with a normal or subnormal temperature should lead to the diagnosis of proable ruptured ectopic pregnancy when there has been severe abdominal pain followed by nausea and perhaps vomiting.

The author advocates wider teaching regarding the advisability of exploratory vaginal incision in doubtful cases. If a case is sufficiently suspicious to be in a hospital it is sufficiently suspicious to warrant a definite decision as to whether an ectopic pregnancy is present or not. In this class of cases a decision can be easily reached by vaginal incision. If there is no ectopic pregnancy the danger to the patient is slight and is compensated by the accuracy of diagnosis.

—Ex.

Book Reviews

A TEXT-BOOK OF PHYSIOLOGY

A TEXT-BOOK OF PHYSIOLOGY, for students and Practitioners of Medicine, by Russell Burtonopitz, M. D., Ph. D., Associate Professor of Physiology, Columbia University, New York City. Octavo Volume of 1185 pages with 538

illustrations. Philadelphia and London: W. B. Saunders Company, 1920. Cloth, $7.50 net.

This work of 1146 pages of table of contents and text together with a carefully well arranged index of 39 pages constitutes a book which must be placed in a rank with the best on the subject of which it treats. It is well illustrated with a large number of diagrams and sketches. In the student days of the reviewer we were told that Anatomy and Physiology constituted the foundation of medicine. Now-a-days we are told that medicine is Physiology, and Physiology is medicine. With this view of the accepted it will be very readily admitted that such an all embracing subject cannot very well be thoroughly considered within the covers of any one book. This volume, however, contains the gist of the most of our knowledge necessary to a practical application of the same to every day needs of the student leaving the finer and more abstruse points for consideration in other volumes.

Standard Nomenclature of Diseases and Pathological Conditions, Injuries and Poisonings for the United States.

We have received from the Department of Commerce Bureau of the Census a copy of the first edition of the above titled book.

For half a century or even longer efforts have been made to popularize as well as standardize words and terms used by the profession in dealing with the "art and science of medicine," with varying and for the most part unsuccessful results.

Lately the Council of National Defense essayed the work; But being unable to complete it on account of other more pressing problems recommended that the nomenclature be completed by the Bureau of the Census. This has accordingly been done. It is to be hoped it will be universally adopted by the whole profession and that whatever of error or mistake may have inadvertently crept in will be eliminated in a second and revised edition which will no doubt be forthcoming.

Advertisers' News Notes

A GREAT HELP IN OBSTETRICS

The posterior lobe of the pituitary gland yields by extraction an agent of great value to obstetricians, for (1) preventing or arresting post-partum hemorrhage; (2) for overcoming uterine inertia or accelerating labor in delayed cases; and for dealing with surgical shock. Given hypodermically for such purposes it is said to serve better than adrenalin for the reason that its effect is longer and more evenly sustained.

A solution thus injected has a contractile effect on smooth muscle fibres (as of the uterus) that is certain and decided. No doctor should be without it in his case or far from a supply when attending women in confinement, against emergencies he may have to meet any day. He should know how and when to use it; when he does he will be well prepared. It is not to be used in early labor but only when the pains are well started, to excite uterine contractions and to make them more effective.

The Abbott Laboratories, Chicago, supply a reliable preparation. Their Pituitary Solution is made from selected glands and standardized to a definite strength. It may be had in ampules or in bulk containers.

A MATTER OF SECONDS

What pathologic phenomenon is more distressing to witness, more harassing to the anxious family, more exhausting and agonizing to the patient, than the acute paroxysm of asthma? When the physician is hastily summoned, frequently in the night, to minister to the sufferer, he is expected to relieve him at once, and failure of the means of relief is embarrassing, to say the least. Hence under these circumstances the physician must have an absolutely reliable and efficient agent at his immediate command.

The most available therapeutic agent in the acute paroxysm of asthma is the original Adrenalin Chloride Solution supplied for many years by Parke, Davis & Co. A hypodermic injection of a few minims of Adrenalin Solution promptly relaxes the bronchial spasm, supports the heart, stabilizes the vaso-motor mechanism, and produces a calm, restful respite from the tumultuous, exhausting efforts of Nature to maintain the respiratory function.

Adrenalin is preferable to morphine because it does not narcotize the patient nor lock up his secretions. Furthermore, it is said that the asthmatic attacks do not occur at such frequent intervals under Adrenalin treatment as when anodynes are employed. The action of Adrenalin is startlingly prompt, and the effect has often described by witnesses as magical—a much abused term, perhaps, but one that expresses the mental estimate of this remarkable drug by those who have had the good fortune to actually see what its effect is in such cases.

The West Virginia Medical Journal

Published Monthly
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Under the Direction
of the
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JAS. R. BLOSS, Editor
Huntington, W. Va.

C. R. ENSLOW
J. E. RADER,
} Assistant Editors
Huntington, W. Va.

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SECRETARY'S REPORT WEST VIRGINIA STATE MEDICIAL ASSOCIATION CHARLESTON, W. VA., MAY 1921.

The Council was called to order by its Chairman, Dr. G. D. Jeffers, Monday evening, May 23rd, at 8:30 P. M. in the Y. M. C. A. Auditorium. Minutes of the Parkersburg Meeting were read and adopted.

FIRST DISTRICT: Morgan present, Linsz absent. Morgan reports the southern end of his district in splendid condition with Taylor County showing more life, activity and a bigger paid up membership than heretofore.

SECOND DISTRICT: Drs. Maxwell and Irons present. Maxwell reports Monongalia County with full paid up membership, 3 new members for 1921 and the rest of the district is flourishing so far as he has been able to learn. Irons reports 9 members in Barbour and 6 non-members, Randolph 22 members 11 non-members four of whom have been dropped from the Society for non-payment of dues, Tucker has 9 members and 6 non-members two of whom have dropped out of the Society for not paying dues. In Barbour, Randolph & Tucker Counties 2 had died and 5 moved away.

THIRD DISTRICT: Drs. Forman and Ogden both absent. Dr. Forman was sick. Dr. Ogden's written report, which was read, showed Braxton, Webster, Clay, Nicholas and Gilmer neglected to pay their dues while Upshur and Lewis are in a very flourishing condition each having two good hospitals doing splendid work with the little professional friction in Lewis County being gradually smoothed out and the profession becoming sronger, more progressive, and more active. Harrison County, with an increase in membership of 5 over 1920 is in the best condition in the history of the Society. A large addition has been made to St. Mary's Hospital which is largely the center of the County's activities. The meetings have been regular, well attended and unusually interesting. The last meet-

ing will be June 1st with a banquet for the wives of the physicians, invited guests and the guest of honor, Dr. Bloodgood of Baltimore who will give the address of the evening on the cancer problem. He closes by saying, "The whole profession is in a better condition now than at any time since I have known it."

FOURTH DISTRICT: Dr. Jeffers present and Dr. W. S. Link deceased.

Dr. Jeffffers reports: Cabell County lively and enthusiastic has 43 members paid up for 1921 with 36 delinquent. Drs. Klump, Biern, Wilkinson and Gabler are new members. Dr. J. M. Emmett has moved to Clifton Forge, Virginia. They have an average attendance of 32 at their regular monthly meetings. Little Kanawha & Ohio Valley had 62 members in 1920; in 1921 48 members with 11 delinquent. Dr. Statts moved to Charleston, Dr. Howell to Spencer and Dr. Werner to Ohio.

FIFTH DISTRICT: Drs. McDonald and Hicks both absent. President Anderson reports Mercer is in good condition, with interesting monthly meetings and 50 out of the 54 members paid up; Logan 20 out of the 22 members have paid up; Mingo has been shot to pieces but the members show signs of life and are slowly paying up; McDowell 36 members have paid out of 42 with many men coming and going. County. THIS IS A FERTILE FIELD OF WORK FOR McDOWELL, MERCER AND RALEIGH AND OUR NEW COUNCILORS, DRS. HICKS AND STEELE.)

SIXTH DISTRICT: Drs. Dunn and Moore present. Dr. Dunn reports Kanawha County with a paid up membership of 118, an increase of 20 over 1920, with weekly luncheons, interesting meetings and the best Society they haave ever had. Raleigh County is active with a paid up membership and has a real live wire as Secretary in the person of Dr. Charles S. Smith. Greenbrier Valley inactive, no meetings and no dues paid. Summers County is medium lively.

Treasurer Nicholson's complete itemized report shows the finance of our Society in a flourishing condition and the substance of his report shows.

May 15, 1920, Cash in Bank	$2600.31
To Cash from Anderson.....	490.66
Interest Liberty Bonds	13.93
May 18 1921 Cash Ashworth	4352.00
Total	$7456.00
May 24, 1920 to May 18, 1921 paid out	$4196.51
May 18, 1921 bal. in Bank	$3260.39
Total	$7456.00

MEDICAL DEFENSE FUND

May 18, 1921, Bal. in Fund $6011.79

INDIGENT FUND

May 18, 1921 Total in Fund $2398.00

Drs. Moore and Maxwell were appointed a committee of two to audit the Treasurer's books. They reported the books were in fine shape and the Treasurer's account was found correct.

Editor Bloss reports that the complaints of 1920 against the editor because of no State and County news has been rectified in part; that much valuable local news had been sent in by Drs. Ashworth, Cannaday and Henson: that many of the County Secretaries are negligent in reporting to the Journal; price of printing is not down; the present troubles of the Journal are due to the printer's strike and this is the reason the June number has not been printed

and that we will be able to come out financially this year without reducing the size of the Journal.

Drs. Morgan and Dunn were appointed to look over the Editor's books and they found them correct in every detail

HOUSE OF DELEGATES

Was called to order by President Anderson, May 23rd, 9:30 P. M. The committees on arrangements, scientific work and publications made their reports The report of the Committee on Public Policy and Legislation was made by its Chairman, Dr. MacQueen. He reported that 50 bills were introduced into the legislature some of which passed and many were killed, that a good vital statistic law had been passed and it is up to the medical profession to make it effective, that the chiropractic law was not changed, the good venereal disease law passed, that we ought to present our policy with a solid front to the legislature at its next session, and that we ought to decide what we wanted and then ask for it as a body. Dr. MacQueen reported that the medical fraternity and the public owed a debt of gratitude to Dr. Godby of the Senate and Drs. McClintic and Greisinger of the House of Delegates for advocating good medical laws and for "killing obnoxious laws." The Society voted that this was the best report the Public Policy and Legislative Committee ever made to the Society and Paid Dr. MacQueen a deserving complimnt for the good work he had done. The following resolution was offered, laid over one day and adopted as an amendment to the by-laws of our constitution.

Whereas it is a regrettable fact that the number of damage suits being filed against members of our profession are increasing at an alarming rate and whereas the majority of such suits are instigated or encouraged by some careless or malicious staement made by some member of our profession.

In veiw of these facts we feel that it is proper that our Association takes a firm stand against such action by our members. To accomplish this result we offer the following amendment to the by-laws of our Association.

It is and shall be unlawful for any member of the West Virginia Medical Association to aid, abet or encourage in any way whatsoever any person in the instigation or prosecution of any malpractice law suit against any member of the medical profession beyond his legal duty as a witness and that a member be expelled who is guilty of the same

SECRETARY'S REPORT

Your Secretary's report will consist of two parts. Part One will be of the year 1920 which includes the administration of Secretary Anderson and will be incomplete because some Secretaries of the Component Societies have failed to make their annual report as required by our constitution and some of the Societies have failed to make a complete report due to change of Secretaries, incomplete records and in one case to

The Secretary's books of the State Association show that 986 membership certificates were issued, that 896 paid defense fund, that 2 paid one-half year, 1 paid three-fourths year and that 1 certificate was issued to J. W. McDonald of Marion County, who was in the service over seas. The file card system shows that 973 members of the Society paid dues for the year 1920.

The Secretaries of the twenty-one Component Societies report that in 1920

789 paid dues, 673½ paid defense fund, 19 dropped out of the Society 5 of whom were from McDowell, 4 from Eastern Panhandle and 3 from Raleigh, that 8 were claimed by death, that there were 27 removals and that 76 new members were added. This gives us a gain of from 20 to 50 members. It is impossible to tell just how many we gained for the address of some of the men who moved were not given. Kanawha leads with a gain of 20 with liitle Kanawha & Ohio Valley, Harrison, Mercer, and Marshall following in the order named.

The Death Record shows that S. J. Posten of Monogalia, J. E. Cox of Raleigh, D. L. Coffindaffer of Harrison, Isaac Smith and Humboldt Yokum of Barbour, Venning of Eastern Panhandle, George G. Junkin of McDowell and Woodford Hinzman of Lewis died in 1920.

Last year the Component Societies had the following paid up membership arranged according to numbers:

1	Kanawha	98
2	Ohio	85
3	Cabell	81
4	Harrison	73
5	L. K. & O. V.	55
6	Merccer	54
7	Fayette	52
8	Marion	50
9	B. R. & Tucker	46
10	Marshall	44
11	E. Panhandlee	42
12	McDowell	42
13	Raleigh	38
14	Monongalia	27
15	G. H. H. Mineral	25
16	Logan	22
17	Lewis	18
18	Mingo	18
19	Greenbrier Valley	16
20	Ritchie	14
21	Summers	14
22	Preston	13
23	Brooke	11
24	Upshur	11
25	Tyler	10
26	Taylor	8
27	Braxton	2
28	Hancock	1
29	Nicholas & Webster	1

I have made this report of the Counties in orde rthat WE MAY KNOW WHERE FERTILE FIELDS MAY BE FOUND FOR ASSOCIATION WORK.

I wish to call to the attention of the Councilors that we have only two members in Braxton, one in Hancock, one in Nicholas-Webster Society, two in Monroe and one in Pocahontas. It is my purpose during the rest of this year to make a survey of all the doctors in each and every county of the state and with the active cooperation of the President and Councilors to get some life enthused into our delinquent Societies and to organize some new Component Societies or have the counties which have few physicians to become affiliated with the most suitable Component Society with which they can affiliate. I am sorry to say that we have no record of the physicians of this state who are not members of any Component Society.

The Minutes of 1921 would not be complete without WRITING IN CAPITAL LETTERS THE ROYAL WAY WE WERE ENTERTAINED AT THE FIFTY-THIRD ANNUAL SESSION IN PARKERSBURG IN MAY 1920. THE GOOD FELLOWSHIP THEY SHOWED US AND THE FINE WAY THEY ENTERTAINED US WILL LONG BE REMEMBERED

BY US. Our records show that there were 231 present.

This brings me to part two or this year's work. I would not make a partial report for 1921 did I not know that you expect a short account of my stewardship for I feel it to be my duty to open the Secretary's book and give you an account of the "deeds done in the body." so to speak and I wish to inform you in the beginning that it is a short humble record of routine work quietly and promptly done with the idea of doing team work in trying to make our State Association a bigger, better and more efficient one. I have made mistakes for which I am sorry and I feel that you will be just as ready to forgive them as I am to acknowledge them.

MY WORK HAS BEEN ONE CONTINUAL SOURCE OF PLEASURE and the only thing I disliked to do was to tell the many good fellows who could have given us brilliant papers no, that the programme was already too full. The year was begun by sending a letter to each Component Society, asking for regular meetings, monthly reports for our Medical Journal, more members this year and the prompt payment of dues. When the Chiropractic Bill was introduced into the legislature fifty letters were sent out asking the members to make a united effort to kill the bill. The last of March another letter was sent out warning the counties that had not paid dues to report at once lest they become delinquent on April the 1st and to fill out blank making report as required by the constitution for the year 1920. The 1st of May another blank for making report was sent out and so far 21 reports have been received. Blank reports for roll of members and for non-members asking for college, date of graduation and date of state license were sent out to all the Component Societies and so far seven have responded.

Our official records show that I have received all books and records belonging to the Association from our former Secretary and that I have turned over $4,350.00 in dues to Treasurer Nicholson. ALL DUES IN MY HANDS ARE TURNED OVER TO THE TREASURER ON THE 15th AND 20th OF EACH MONTH AND ALL NAMES ARE TURNED OVER TO THE WEST VIRGINIA MEDICAL JOURNAL AND THE AMERICAN MEDICAL ASSOCIATION The card index system has been stamped with the dates the different members have paid their dues and all records received from the Component Societies of the place and date of graduation and date of state license have been entered. ON THE VERY DAY DUES WERE RECEIVED MEMBERSHIP CERTIFICATES WERE ISSUED AND SENT OUT. Aid was given Councilor Morgan of the First District in getting Tyler county together and both of us visited that Society. Twelve hundred programmes were printed and 985 were sent out to members and invited guests. Three hundred badges were ordered.

This year's record shows that Kanawha has a paid up membership of 118 which is an increase of 20 over last year; Marion 58 an increase of 8; Harrison 78; an increase of 5; Monongalia 30; an increase of 3; and Ohio 87, which is an increase of 2. Making us a gain of 38 members this early in the year in five counties. Ritchie has a paid up membership and several other counties have reported nearly all the members paid up. Eight hundred and ninety-six

members have paid up to date which is a better showing than has been made in former years. The present indications are that we are going to have a bigger paid up membership this year than ever before and great sorrow will hang over the Secretary's office if we do not gain a membership of one hundred.

MAY I ASK EACH OF YOU IN THE NAME OF MEDICAL SCIENCE AND IN ORDER TO BE MORE USEFUL TO THE PUBLIC, WHO MUST ALWAYS LOOK TO US IN THE PREVENTION AND CURE OF DISEASE TO GO BACK AND TELL THEIR FELLOW PRACTIONERS WHO ARE NOT MEMBERS THAT THEY WILL GROW STALE AND FALL OUT OF LINE WITH MEDICAL PROGRESS AND THAT THEY WILL BECOME SELFISH AND NARROW UNLESS THEY ASSOCIATE THEMSELVES WITH THE MEDICAL SOCIETIES AND ATTEND THEIR MEETINGS. And with the sacred earnestness that Paul tried to impress upon the Greeks and Romans the importance to their souls of Christ's redeeming blood, so you impress upon them the value oof membership in the medical societies which gives them the advantages of the best fellowship on earth. Go, have them join our Society.

Under New Business Dr. Churchman offered the following resolution which was read and adopted.

Whereas there has been considerable discussion regarding the advisability of establishing a four year, Class A., Medical School in West Virginia, and, we daily see the need of such an institution, especially in our rural districts, and;

Whereas the recent legislature failed to pass a law establishing such an institution; therefore be it;

Resolved that we the West Virginia State Medical Association in Aannual session assembled, do hereby agree to do all in our power to see that there be established in West Virginia a Class A. Medical School, and, to further the same, do agree that we shall use every endeavor to see that the W. Va. Legislature does pass a suitable law establishing such an institution;

Resolved further; that we favor the plan of the Governor appointing a Commission of five, at least two of whom shall be physicians, members of the W. Va. State Medical Association, to locate, and superintend the construction of such an institution;-

Resolved further; that the President of the W. VA. State Medical Association shall appoint a lecturer for each congressional district, whose duty it shall be to go into such districts and make addresses at the request of each Component Society in such district either to the profession or a mixed audience advocating the establishment of a four year, Class A. Medical School. Such lecturer shall be paid his expenses on such trips by the W. Va. State Medical Association.

RESOLUTION OF SYMPATHY AND RESPECT

The West Virginia State Medical Association in session at Charleston deplores the deaths of some of its most valued members and wishes to extend to the families of these deceased brethern whose names appear below its very sincere sympathy and that a copy of this resolution be inscribed on the min-

utes of the Association and a copy also be sent to each of the families and furthermore a copy be inserted in the West Virginia State Medical Journal

Dr. E. H. Thompson,
Bluefield.
Dr.W. S. Link,
Parkersburg.
Dr. S. J. Postin,
Monongalia.
Dr. J. E. Cox,
Raleigh.
Dr. D. L. Coffindaffer,
Harrison.
Dr. Isaac Smith and
Dr. Humboldt Yokum,
of Barbour, Randolph & Tucker Counties.
Dr. R. E. Venning,
Eastern Panhandle.
Dr. Geo. C. Junkin,
McDowell.
Dr. Woodford Hinzman,
Lewis.
Dr. Charles W. Halterman,
Clarksburg.
Dr. J. McKee Sites,
Martinsburg.

MILITARY RESOLUTION READ AND ADOPTED

Whereas, Citizens Military Training Camps have been provided by law to be conducted by the War Department of the United States Government for the purpose of promoting good citizenship and an interest in National Defense whereby young men of all occupations will be brought together on a basis of equality under the most favorable conditions of out door life and in addition to training and instructions in the elementary duties of a soldier and the ordinary routine of camp life, the ideals of devotion to Country, good comradship, team work and of virile American manhood will be strongly emphasized.

Whereas, the Citizens Military Training Camp for the Fifth Army Corps Area will be ,opened at Camp Knox Louisville, Ky., on July 21, 1921 to continue for a period of four(4) weeks and;

Whereas, as a preliminary to entrance of candidates there is required a medical examination, and,

Whereas, The State Medical Association of West Virginia has always stood for loyalty to Country and true Americanism, therefore, be it,

Resolved, that The State Medical Association of West Virginia endorse the program of the War Department relating to the Military Training Camps, and recommend to the patriotic men of West Virgina, that they maintain their high reputation of voluntary service in the Armies of their Country by availing themselves of the opportunity to receive a month's physical and military training at the expense of the Government for transportation, uniform, food and medical care with no later service obligation, and this Association further:

Resolves, and recommends to its membes that they make gratuitous physical examinations of candidates to these camps.

TO COOPERATE WITH THE TUBERCULOSIS ASSOCIATION

A motion that our committee on Public Policy and Legislation get together with the West Virginia Tuberculosis Association and cooperate with them in planning a legislative programme and that each Component Society assist the Tuberculosis League in their survey in

obtaining any information they may desire. Adopted.

REPORT OF COMMITTEE ON PRESIDENT'S ADDRESS

Your committee respectfully reports that the suggestions in the address of President Anderson are all timely and, if followed by the Association, must redound to the good of the organization. However, we wish to commend two which are especially pertinent.

The first of these is that all members of the West Virginia State Medical Association keep in close touch with the committees on Public Policy and Legislation and give this committee better supports in the efforts they put forward. We cannot commend this suggestion too strongly for we feel that "United we stand, Divided we fall" applies with especial force to the medical profession.

The second suggestion to which we call particular attention is that a determined effort should be made to secure the establishment of a four year class —A Medical College within the State of West Virginia. It is the belief of the committee this is the most important issue facing the medical profession in West Virginia today and that it behooves every physician to bestir himself and exert all his influence with his representative in the State Legislature to secure the passage of the necessary laws to effect this end. The rural districts are now without the proper medical service. The trend of the population to the cities has effected physicians as well as the other walks of life and the medical school of other states are limiting the number of their matriculates. Hence, in order to supply the need in our state, we believe it necessary to establish a class A Medical college within our borders.

W. E. Vest, chairman
Aaron Arkin
S. F. Hoffman
Committee.

REPORT OF COMMITTEE ON SECRETRY'S REPORT

MR. PRESIDENT & MEMBERS:

Your committee has reviewed and considered the annual report made to this Association by Secretary Robt. A Ashworth and find that this report shows that this Association is in a flourishing condition, that its membership has increased during the year, and that the general activities of the Association have been such as to indicate that the medical profession of West Virginia is becoming more and more interested in the things that mean for its betterment.

Your committee feels that the work already accomplished by our Secretary since his elevation to this office and the spirit and the enthusiasm which seems to dominate his every act, in even the smaller as well as the larger details of his position, would indicate that this Association has in the present Secretary an efficient, courteous and pleasing officer and one who is certain to maintain the high standard of work and efficiency so signal of those who have preceded him.

ELECTION OF OFFICERS FOR 1921

Pres. Dr. George A. MacQueen Charleston.
First Vice Pres. Dr. J. R. Caldwell Wheeling.
Second " " Dr. G. C. Schoolfield Charleston.

Third " " Dr. H. L. Goodman McKendree.
Secretary Dr. Robert A. Ashworth Moundsville.
Treasurer Hugh G. Nicholson Charleston.

COUNCIL

First Dist. Dr. Chas. G. Morgan Moundsville.
Second Dist. Dr. J. C. Irons Dartmoor.
Third Dist. Dr. C. R. Ogden Clarksburg.
Fourth Dist. Dr. G. D. Jeffers Parkersburg.
Fourth Dist. Dr. J. E. Rader Huntington.
Fifth Dist. Dr. H. G. Steele Bluefield.
Fifth Dist. Dr. Chas. F. Hicks Welch.
Sixth Dist. Dr. R. H. Dunn Charleston.

DELEGATE TO A. M. A.

Dr. H. P. Linz; Alternate Dr. A. P. Butt. Place of Meeting — Huntington, W. Va.

The Secretary was instructed to employ a stenographer to take the proceedings of the future meetings of the Association.

At the banquet Wednesday night Dr. Ashworth presented on behalf of the Councilors and Secretary a beautiful watch charm to the President, J. Howard Anderson, in recognition of the services done as Secretary and President to the West Virginia State Medical Association. On one side was the inscription "West Virginia State Medical Association, Instituted April 10th, 1867" with the rest of the seal of the State Association. On the other side "J. Howard Anderson, President, 1921."

Yours fraternally,
Robt A. Ashworth.

THE RADIUM TREATMENT OF UTERINE CANCER

By Curtis F. Burnam, M. D.,

Read at Annual Meeting of the West Virginia Medical Association at Parkersburg, May, 1920.

Mr. President, Ladies and Gentlemen:

The well known and generally accepted rule that success in treating malignant new growth is directly proportional to the thoroughness of treatment and indirectly proportional to the extent of the disease holds true nowhere more than in Cancer of the Uterus.

Let us redouble our efforts to bring Uterine Cancer sufferers to treatment while the disease is still in its initial stages. Every good doctor should be a missionary amongst his own patients, and surely much can still be accomplished by an organized effort to bring to the laity a knowledge of the symtoms and diagnosis of this prevalent and deadly disease.

In order to secure the very best results from treatment with the agencies now in our hands it is, in my opinion, necessary that a widespread, systematic and thorough study of the cases and the methods of treatment be undertaken anew. The technique of radical hysterectomy for uterine cancer had been developed and employed for more than ten years when Radium made its appearance. It had achieved a splendid success and had demonstrated that some cancers of the uterus were curable. Nevertheless, hysterectomy was begining to fall into a little undeserved discredit through a well-intentioned but fruitless effort to employ it in cases already inoperable. Many failures obscured the successes and tended to discourage both doctor and patient and bring about a hopeless state of mind.

The advent of Radium brought a new solution to the problem and immediately widely extended the range of patients who could be fruitfully treated. At first no claim was made for the new treatment other than that it was a splendid palliative, checking hemorrhage, drying up foul dicharge, relieving pain and prolonging life; and if it did only *the*se things radium would still be well worth all efforts. Happily we now know that this new agent can actually cure and permanently cure many cases of uterine cancer where no other treatment offers any hope whatever.

In considering the indications of treatment, a separation of operable from inoperable growths is essential and necessary; and likewise cancers of the body of the uterus, vagina and cervix must be separated. Inoperable cancers should be divided into a number of sub-groups in order that a definite limit may be set for the indications of treatment in each class. The necessity for such classification is apparent when one considers that patients with general metastases, those with urinary bladder involvement, those with rectal involvement, those with regional gland involvement and all recurrent cancers after operation are all classified together as inoperable cases. It is perfectly obvious that the kind of treatment applicable in these different classes of cases is quite different and the outlook toward both palliation and cure very variable.

The experiences which I propose to cite cover a period of eleven years and represent the joint activities of Dr. Howard A. Kelly, myself and our associates.

We had treated in all up to one year ago 700 uterine, cervical and vaginal cancers, and had excluded from treatment only sufferers with advanced general carcinomatosis, and not all of these, for it was impossible to refuse palliation in some cases where cure from the outset was out of the question.

I purposely omit from this consideration the cases treated during the last year as not enough time has elasped to draw from them definite conclusions as to results.

For the sake of clearness, cancers of the uterine body, cancers of the vagina and cancers of the uterine cervix will be considered seperately, and in each instance the operable and the inoperable cases will be treated of in sub-headings.

CANCERS OF THE BODY OF THE UTERUS

Where there is no fixation and where there is no organic disease contra-indicating operation, hysterectomy should be the method of choice, for the extent of the disease is too much a thing in the the dark and Radium cannot be used with sufficient precision.

We have, however, abundant evidence as to the effectiveness of Radium on adeno-carcinoma of the uterine body. In a group of patients, where the general health contra-indicated hysterectomy and where radium was used, we have seen not only cessation of bleeding and of discharge, but also a great improvement in general health and apparent cure extending over several years. Moreover that Radium can cure cancer of the body of the uterus has been secured in several cases where the uterus has been removed after a preliminary treatment with Radium.

When for any reason Radium is employed in treating operable cancer of the body of the uterus, it is best given in a single exposure, the equivalent of 4 gram hours of radiation, with the material so distributed that every part

of the uterine cavity receives as nearly the same treatment as possible.

While such a considerable proportion of the corpus cancers are operable, it is striking that in the inoperable cases the disease is likely to be very advanced and much more often generally metastasized than is the case with epitheliomas of the cervix or vagina. While we have seen shrinkage of tumor, alleviation of pain and improvement of general health follow efforts with radium, up to the present time we have not seen a complete cure in a large inoperable cancer belonging to this class, and indeed our efforts most frequently have not been rewarded by pronounced palliation. Occasionally we have been able to demonstrate the disappearance of large metastatic abdominal masses of corpus carcinoma following distance radiation through the lower abdomen, sacrum and perineum. In such treatments we have given as much as 150 gram hours radiation at a distance of five inches through six or more portals. In other cases we have opened the abdomen and implanted glass spicules, containing from 1 to 10 millicuries each of radium emanation, throughout these masses. Here also we have had pronounced evidence of improvement; indeed, in several instances we felt that we had obtained cures, only to be undeceived later by the appearance of recurrence.

CANCERS OF THE VAGINA

Early cancer of the vagina is rarely met with and there is very little available data as to the permanent curative value reported in most clinics of the cancers of operative removal. The cure rates of the vagina presenting themselves for treatment have not been much more than one or two per cent. Many eminent gynecologists have never had a cure. I, personally, have seen one operative cure.

Where the disease is advanced radium alone should be used. It nearly always acts as a palliative, and in a series of 129 cases we have had fifteen complete cures, four of which have been for more than five years and one for nearly nine years. Not one of these fifteen was early or operable. We, therefore, urgently recommend the employment of radium in the treatment of vaginal cancer.

Where the disease is superficial the arrangement of apparatus inside the vagina should be such that each square centimeter of surface receives the equivalent of a gram thirty minutes treatment.

Where there are large and fixed paravaginal masses, such surface applications should be supplemented by burying points containing radium emanation. The strength of the buried emanation depends on the size of the mass and has varied from 2 to 3 millicuries to more than 50.

CANCERS OF THE CERVIX OF THE UTERUS.

This class is the commonest and consequently the most important group under consideration. In addition to the operable and inoperable sub-groups, may I be permitted to introduce a third representing the border-line conditions between the other two.

An operable cancer I define as one in which the disease is confined to the cervix or only slightly involves the parametria and vaginal walls; a borderline cancer is one where the parametria are stiffened or the vaginal wall extensively involved or even where there is slight fixation to one side. Inoperable cancer includes, as already pointed out, a varity of stages where operation can no longer be undertaken with any hope of complete removal of the disease. As inoperable conditions should be classi-

fied those cases where there is firm fixation to one or both pelvic walls, or extensive involvement of the bladder or rectum; cases where there is extensive lymph gland involvement and nearly all cases which are recurrent after operation.

Some conception of the possibility of permanent cure in cervical cancer by means of radium treatment is afforded by a study of our first 200 border-line and inoperable cases. In June, 1915, at the annual meeting of the American Medical Association in San Francisco, Dr. Kelly and I reported apparent cures in 53 of these 200 cases. Only 9 of these cures had been longer than one year. Of these 53 cases reported five years ago 30 are still living and free from all evidence of the disease, and in one case the cure has been for eleven years. This represents a permanaent cure rate of 15% in a group of cancers where not 1% could be expected by any other means.

Taking our experiences as a whole, the following results have been obtained in cancer of the cervix.

Radiation alone — Operable cases. Cures 50%

Radiation preliminary to operation — Operable cases. Cures 46%

Radiation prophylatic after operation — Cures 43%

Radiation in border-line — 31%

Radiation in inoperable — Cures 9%

Radiation in recurrent inoperable — Cures 11%

In considering the relative values of surgical and radium methods, there is possible competition only in sub-group 1, the operable cancers.

It is true that the anatomical structure and position of the cervix permits of an intensity of radiation without serious injury to normal structures quite impossible in most places where epitheliomas occur. However in skin cancers particularly we have been impressed by the fact that certain growths enormously tolerant to radiation are readily curable by extirpation, and it is not a far step to assume that the same condiition holds true in cervical cancers. Granting that this is the case, a combination of radium and operation would seem to be the most logical treatment. I should advise that radium alone be limited to the old, the diabetic, the nephritic and other constitutionally sick vervix cancer sufferers; that radium and operation or operation alone be used with the remainder until definite conclusive evidence is at hand as to the relative values of th different procedures.

I feel that an endeavor should be made to develop a systematic regional gland extirpation in cancer of the cervix uteri such as we employ in cancer of the breast and cancer of the lip. This procedure has been abandoned largely because it added so much to an already long and dangerous operation. If, however, operative removal of the uterus be limited to the early cases, hysterectomy is neither a long or dangerous operation and the gland removal could be safely carried out. In the more advanced cases the treatment of the local lesion should be limited to radium and a systematic surgical gland removal carried out.

The implantation of radium emanation in abdominal metastases which are not surgically removable can only be carried out through an open abdominal incision. While, therefore, in the early operable cases radium may be looked upon as an assistant to surgical removal, in the border-line and advanced cases radium should occupy the principle position and surgery be the helpful aid.

One of the chief charms of radium as

opposed to surgery is its freedom from danger. I should like to call attention, however, to the fact that injudiciously and excessively employed it can produce very grave injuries and even cause death. It should always be borne in mind that all living tissues are injured by radium radiation and that its value in treating cancer rests upon a greater tolerance to it of normal than cancerous tissues. One must treat so that the dose is great enough to cure the cancer and yet not so great as to destroy all normal contiguous tissues.

Over-radiation, producing a burn which heals in a few weeks, sets up two processes: first, an endarteritis and, secondly, a limitation of the power of reproduction of the cells of all the tissues. The result of these two processes is that usually from four to ten months after the healing of the burn a new ulcer sets in, which is very painful and clinically closely resembles cancer. The healing of such ulcers takes months and vesical and rectal fistulae frequently follow.

In the operable and the early borderline cases efficient protection of the rectum and bladder and yet adequate radiation is comparatively simple; in the very extensive inoperable cases such ideal conditions are often impossible of attainment.

A safe and effective treatment of the cervix and the contiguous parametria can be secured by a disposition of tubes over and in the cervix in such a way that four gram hours of treatment can be given in a single dose, or six gram hours if treatment is divided into four equal doses at intervals of a week. It seems to me that this second treatment is the better of the two. Heavy lead screens should be adjusted between the cervix and the rectum. If this technique is carried out one practically never sees proctitis or painful burns.

In recurrent masses and in high parametrial extensions the employment of the burying techninque already described in indispensable.

The value of trans-abdominal and distance treatment in cervical cancer is at present difficult of estimation. It is more likely to be efficacious in the basal cell type of growth and in the adenocarcinomas than in squamous cell cancer. I have seen marked regressions and even disappearances in growths treated in this way. Most often, however, there is only slight improvement either anatomically or in amelioration of symptoms, and unless very prolonged treatments, running into the hundreds of gram hours, are given, this will not yield results. Efforts in this direction must go on, however, from the standpoint of development of the treatment of huge, inoperable cancers.

I feel that the method of treatment to be used in an advanced case is still in question and that dogmatic direction is out of place, for the present at least.

Before concluding, perhaps one other expression of opinion may be of interest. It is this: We do not think it is advantageous to surgically remove, after clinical cure has been obtained, uteri which have previous to radiation been inoperable, that is, fixed to the pelvic wall on one side or the other. That such a procedure may not be followed by any ill effect we have demonstrated, but the results have not been as satisfactory as where we have let the patients alone. This may be due to the fact that cancer cells can remain quiescent for many years, only to be stirred up by some

trauma, such as operation ideally represents.

Let me also emphasize that the beginner should not wade through all the misadventures which we pioneers have gone through with. The cost to the patient is too high. Take time, go to those who have had experience and learn how to use the radium to the best advantage and with as little danger to the patient as possible.

I am frequently asked the question: How much radium is necessary for adequate treatment of uterine cancer? The important physical factors in determining treatment are the amount of radium, the time of exposure and the distance of disease from the source of radium. The most universally used method is by topical application of radium directly to the cervix and to the vaginal wall. Such a method has in the very nature of things its limitations to growths which are not too extensive. A minimum requirement for first-class work by this method is 200 milligrams placed in at least four or five different tubes so that flat applicators can be constructed at will. Where the cancer is widespread, distance radiation is indispensable. In order to secure a penetration into the depths and at the same time not burn or injure the skin, a distance of from 10 to 15 cms. must be employed. In this kind of work at least a gram of radium must be available for treating a single case.

An emanation plant can be economically operated for a general hospital if a gram of radium is available, and the use of emanation in place of radium salts is of great advantage, as it makes possible the use of an elaborate burying technique with fine points and also enables the user to devise suitable apparatus for the individual case, which is absolutely necessary for the best treatment.

When a tube of radium is placed directly in the cervix, a dose of three gram hours can be given without serious destruction of normal tissues and with a complete destruction of the cancer within a radius of 1½ inches. In more than 30% of the very early cancers of the cervix there are miscroscopical evidence of cancer in the parametrial tissues—For that reason no operation except one which radically removes these tissues with the uterus should be carried out. This means an abdominal hysterectomy if the Wertheim type.

Whenever a woman bleeds irregularly, has discharge, or any pain in the pelvis, the possibility of cancer must be kept in mind regardless of the patient's age. We have seen women as young as 18 with cervical cancer. If an ordinary office examination does not allow a definite exclusion of cancer, it is indispensable to examine under anesthesia, and for this purpose nitrous oxide affords an ideal agent. The chief difficulty of diagnosis lies in those cases without any involvement of the vaginal portion of the cervix. In such cases particularly is the rectal examination all-important. A shortening of one or both of the bases of the broad ligaments is always highly suggestive of cancer. In every case curettage should be made and a microscopic examination carried out. It is impossible to clinically differentiate luetic, tubercular and other non-specific ulcers which are by no means uncommon from epithelioma.

The possibility of treating advanced cases, not only palliatively but curatively, by radium has made necessary a careful pre-treatment determination of the extent

of the growth. Partial removal of the uterus in cancer of the cervix is a very harmful procedure, as well as a dangerous one, and we are no longer able to console ourselves after an ineffectual hysterectomy by saying that in any case all that was humanly possible has been done.

An operable cancer of the cervix, as can be readily seen by figures 1 and 2, is one where the disease is limited to the cervix, and where there is but little or no extension on the vaginal wall overlying rectum and bladder. A border line cancer of the uterus is one in which one or both broad ligaments are grossly involved and in which there is extensive involvement over the vaginal wall, but where there is still movability on bi manual vaginal and rectal examinations, and where there is no evidence of metastasis. All other cases are inoperable.

I should like to repeat that in my opinion only the cases belonging to group 1 should be submitted to surgery, and then only when the general condition of the patient is such as to make probable a successful immediate recovery from the operation.

RADIUM IN THE CONTROL OF UTERINE HEMORRHAGE

Read Before the Mercer Co. Med. So'cy, Bluefield, W. Va. Feb. 24, 1921

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The application of radium in the control of certain uterine hemorrhages is well beyond the experimental stage, and its value is now so well established by satisfactory clinical results that any prejudiced opposition must give way to its use. This statement applies, provided of course that radium is used discriminatly and in properly selected cases. Any innovation is too apt to be fraught with undue enthusiasm, and a new remedy is easily brought into disrepute by applying it in conditions for which primarily it was not intended at all. The menorrhagias occuring all the way from puberty up to and through the menopaus, some of them dependent upon gross lesions and others without demostrable pathology, have presented frequent and perplexing problems. Formerly surgery was the only means of dealing with all such cases, but conservative measures generally did not give relief, and a major operation, unavoidably mutilating, seemed a radical procedure, the operation performed often in the presence of intractible hemorrhage only. Obviously operation, under certain circumstances, remains the only practice of choice, but in far the greater number of cases of menorrhagia, it is now possible to substitute simpler means for more radical measures. Myopathic hemorrhage and hemorrhage the result of certain types of myoma respond readily and effectively to radium rays, and from the viewpoint of the patient and from considerations of safety, efficiency and morbidity, this means of control must supplant largely surgical intervention. The danger and inconvenience of application are so insignificant and relief is so certain, that to continue to perform major operations for these conditions is merely to keep up a practice from prejudice and to risk a position difficult to justify. The practice on the contrary has well defined limitations, and

it would be more absured to fall into the habit of radiating every uterus that bleeds. Radium possesses easily the power of bringing about an abrupt menopaus and must be used cautiously. Indiscriminate use invites certain disaster, but applied within the bounds of fixed indications, the innovation is welcomed, and results can have but little to condemn it but much to commend it.

In determining what cases of menorrhagia are suitable for radiation and what cases belong strictly to surgery, the difficulty, in the majority of cases, is more apparent than real. The line need not be sharply drawn in many of these cases, and the choice permits of a reasonably wide variation among individual operators. Hemorrhages accompanying malignancy necessarily do not enter into discussion of the menorrhagias for which radiation is claimed as a control, except so far as it is imperative to exclude the actual existance of such a condition. It is obvious that carcinoma, especially that arising in the cervix, opens up another field all its own, a field also in which radium has a recognized place but accomplishing uncertain results which in no way are to be confused with the uniformly satisfactory results obtained in non-malignant conditions. It is likewise true that the hemorrhages occuring as a part of the process of pelvic inflammation have no place in radium therapy, for, by the very nature of the process, these cases are surgical, and radiation is not only a definite contra-indication, but its practice is actually dangerous. This applies even where a myoma, otherwise suitable for radiation, is complicated by any inflammatory condition, active or quiescent, which might be accentuated or which might flare up under the effects of radium rays. When these two conditions, malignancy and infection, are eliminated, it is to be expected that a persistent and serious menorrhagia, with trifling exceptions, is dependent upon the presence of a myomatous tumor or else is occuring as a simple myopathic hemorrhage. About the latter there can be no contention as to the method of control; radium, admittedly so almost without exception, is the treatment par excellence and is almost 100 per cent efficient. These hemorrhages, without demonstrable pathology, are of frequent occurrence, the majority of them accompanying and being a part of the menopaus. Without having in view but one purpose, that of controlling hemorrhage, a full menopausal dose of radium can be administered, and the results are like magic. The essential hemorrhage of younger women is as sensitive to responce, but the gradation of dose becomes of prime importance, since normal restoration and not cessation of menstruation is the aim. In those menorrhagias which are dependent upon uncomplicated myomatous tumors, a divergence of opinion arises at once as to just what cases are suitable for radiation and what conditions must be present to make surgery serve a better purpose. In certain well selected cases, with less danger to life and less inconvenience to patient, radium undoubtedly controls hemorrhage and effects a satisfactory retrogression of the tumor. How far the practice of radiation can go and a position of preferable procedure be maintained furnishes the main point of contention in the use of radium for the control of hemorrhage. At the expense of being tedious, opinions widely at variance are recited, with the hope of attaining a moderate position which is both safe and tenable.

Howard A. Kelly, whose interest in radium must accord him a place of pioneer and whose experience has been exceedingly large, takes a position which might be considered the extreme in its insistence upon radiation as the treatment for uterine myoma. In a comprehensive article (1) appearing in 1918, 210 cases thus treated, covering approximately a period of five years, are reported. After an experience of operating in two thousand such cases, he appreciates the importance of perfecting surgical technic, but he is mindful of the dangers of surgery, its complications and sequelae, and would welcome some better substitute procedure. Surgery is not superceded in all cases, but radium he admits a safer and better course. By such treatment he claims control of hemorrhage and the better checking of menstruation, the shrinkage of the tumor and in many instances its disappearance, and in some cases the return of menstruation, either normal or scanty. No mortality occurred in the series, although 21 of the patients could not have been operated on without great danger owing to serious systemic complications. The size of the tumor does not enter into the discussion in this report; intra-uterine application and radiation with massive doses over the abdomen were both practiced. Calcarious degenaration, malignancy, and tumors filling the pelvic outlet were contraindications. Of the 210 cases reported, 64 were under 40 years of age, and the note is made that it is just as easy to treat effectively young women as those who are older. During the same period of time, 45 patients, on account of complicating conditions, were admitted for operation, and it is interesting to note that only 8 of these were excluded as not suitable for radium series, 28 cases are omitted in checking up final results on account of incomplete data, leaving a total of 182 from which to draw conclusions. Hemorrhage was controlled in all cases in which it was a sympton. The tumor was gone or practically gone in 94 cases, dimished in 64; 13 were symptomatically well, no examination, and 2 were improved; 9 had operations after radiation.

A position totally at variance with the foregoing practice is the position taken by John B. Deaver of Philadelphia. Reporting a year's work in hysteerectomy (2), he recites 130 operations. Of these, comprising both complete and subtotal hysterectomy, 105 operations were done for fibroids. In 86 of the total, one or more complication existed, but it is not stated in what number of the cases the complications were adnexial or local in the tumor, when radiation might be contraindicated. Over the same period of time, radium was used 5 times in myoma and twice in chronic endometritis. Radium is mentioned largely to condemn it. Certain effects are admitted, the control of hemorrhage and the reduction in size of the tumor, but there must be considered the effect of the presence of mutilated and destroyed tissues. It is suggested that no uterus or the neck of one is to be preferred to one burned to death and that an empty house is better than an undesirable tenant. Radium treatment of fibroids in four instances brought to the attention of the author had been the direct cause of death.

The concensus of opinion will not yield to radium the wide field of application claimed for it by Howard Kelly in the treatment of uterine fibroids. Striking results cannot be denied, but the difficulty attendant upon application in large tumors and the quantity of

radium necessary for massive radiation would make against such general use, even if certain dangers did not exist. Safeguarding the best interest of the patient will likewise not accept the nihilistic position of Deaver. The mere insinuation of a uterus burned to death is rather trifling argument when no proof is furnished of such a situation. A sane position, one which admits the value of any innovation but possesses none of the attributes of unrestrained enthusiasm, is a position alone which is tenable. John G. Clark (3) cautiously reviewing results in 150 cases of myoma and myopathic hemorrhage treated with radium, takes an attitude conspicuously free of prejudice and lays down certain well defined lines of procedure which can be followed with safety. The control of hemorrhage is the primary object in every radiation. Basing the policy on previous years of surgical experience, which has shown a great frequency of associated lesions in large tumors, notably varying stages of degeneration, the practice of radiation, except under very unusual circumstances which render an operation dangerous, is limited to a class of tumors which are the size of a three months' pregnancy or smaller. In myopathic changes in the uterus and in the smaller myomas, there is not a safer and a more certain means of controlling bleeding, and when these conditions obtain in a middle aged woman, surgery no longer has a place. Radiation in a younger woman must proceed with a great deal more caution. Myomectomy, whenever possible, is the practice of choice then, since the menstrual function is not disturbed and the chance of subsequent pregnacy is much greater. The work at the Mayo Clinic (4), furnishing an abundance of statistacal data on 600 cases of menorragia treated with radium, follows very much the same lines of procedure laid down by Clark.

The technic of application consists simply of placing the radium within the cavity of the uterus. The operation is done with or without anaesthesia, preferably with an anaesthetic, since this permits of a preliminary curettement, in many cases imperative for diagnostic purposes. For bleeding about the menopause, where there is no demonstrable tumefaction, 50 mg. applied over a period of 24 hours is a routine, and usually effects a complete cessation of menustration. In fibroids it may be necessary to repeat radiation once or twice at intervals of 4 to 6 weeks before a complete retrogression of the tumor takes place. In younger women, where it is important to preserve the menstrual function, much smaller doses, 300 to 600 mg. hours are administered and repeated if necessary to accomplish satisfactory control. The radium of course carries a full complement of screens for beta and secondary rays. We have our own supply in units of 25 mg., which permits of a large or small dose and an arrangement in tandem fashion if a wider radiation of the uterine wall is desired. The patient remains in bed as after a simple curettement and can leave the hospital after the end of 5 days.

Our own work in the treatment of uterine hemorrhage with radium extends over a period of ten months (April, 1920, to Feb. 1, 1921) and includes 26 cases. In far the greater number of the series, the hemorrhage (in 22 cases) was not dependent upon demonstrable pathology and was designated simply as essential or myopathic. Fibroids were made out in four instances and were responsible for active bleeding only. The possible exist-

ence of malignancy was an important consideration in cases in or near the cancerous age. We have gone on the assumption, a great deal, that hemorrhage about the menopaus which retains strictly the cyclic menstrual type is usually non-malignant. Scrapings are examined microscopically in doubtful cases, although a negative report in this respect is obviously not final. We have ruled out infection active or quiescent, by clinical history and pelvic findings. We make it a rule to consider every case of menorrhagia definitely pathological and serious before radiation is resorted to as a means of control. Many of the cases in our series had complained of profuse menstruation for from one to five years, and some of the patients had bled most of the time for weeks and even months when they came for treatment. In the total of 26 cases, 16 were 40 years of age or more and 8 between the ages of 30 and 40; one patient was 27 and another 17. The dose of radium varied from 300 to 1200 milligram hours and one exceptional case had 50 mg.. over a period of 31 hours.

It is obvious, since so short a time has elasped since our first cases, that we can discuss only the immediate effects of radiation. These effects as noted by us conform generally to those reported by other observers. A fair number of cases complained of nausea, and this was certainly more pronounced than that following an ordinary short anaesthetic. This was without consequence, and equally as many patients did not complain at all. The symptom of pain was noted in but one case. In this single instance it was more than ordinarily pronounced and merits some special mention. A woman (11422), having what semd a simple menopausal hemorrhage, had 50 mg. of radium placed in her uterus for a period of 24 hours. She required morphia repeatedly for the relief of pain during radiation, and the pain, without temperature at any time, has persisted (3months) with only very slow improvement. We are unable to explain so unusual a result, and we would now advise hysterectomy. Leukorrhoea following radiation has not been brought to our attention by any of the patients whom we have seen. The symptom doubtless was a more marked feature before the general adoption of screening secondary rays. The effect of radium on the menstrual function depends necessarily upon the dose of rays administered. After a full menopausal dose of 1200 milligram hours, it is to be expected that from one to three periods will occur, with a complete cessation following. We have noticed such results, but it has also been our experience that such a dose has often been followed by no further bleeding at all. A dose of 600 milligram hours, where the menorrhagia has been marked, has tended to restore menstruation to normal rather than to effect a cessation. In certain instance, small doses have stopped the periods for a certain period of time, with a return of normal menstruation later on. This was the case in a young girl who received 300 milligram hours after repeated curettements had had no effect on her menorrhagia. This case had no menstrual period for eight months when a normal period occurred.

Since we have a recognized technic and have selected cases and made application along lines of an established procedure, we can be confident that end results will be similar to the satisfactory experiences of workers in some of the larger clinics. More than half of our

cases have come under observation directly or indirectly since radiation, and with the exception of unexplained pain in a case already noted, we could hardly wish for a more satisfactory and effective remedy. Our own work has been largely surgical, and it was with some reluctance that we have yielded to an innovation which has reduced materially the volume of this branch of work. When the innovation, however, has accomplished and without the danger and certain ill effects of operation, we had no alternative but that of accepting a slmpler procedure. The control of hemorrhage is about as certain as any of the things we know of in medicine. Even in our short experience, we have noted the most complete control of intractible hemorrhage aand rapid recovery from severe anaemia, with gain in weight and improvement in general health. Menopausal cases have had full doses of the rays, and results are so uniform that these cases are no longer objects of later observation. One patient (10394), whose menstrual life we wished to preserve on account of age, after a 600-milligram hour dose, has had menstruation restored to normal, and her health is better than it has been for years. Another case (11519) only 30 years old, given the same amount of radiation, has had her menstrual periods reduced from 12 or 15 days in the month to 6, with a disappearance of a great deal of pain which formerly accompained the flow. A notable end result was in the case of a colored woman who had a fibriod fully the size of a three months' pregnancy. This fibroid had caused bleeding for a period of 6 years and had brought about a condition of grave anaemia. The hemorrhage was instantly controlled, and when the patient reported for examination 6 weeks after radiation, the tumor was reduced to one-third of its former size.

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INDICATIONS FOR USE OF RADIUM

Read Before Cabell Co., Med., Socy 1921

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The value of Radium in the treatment of malignancy is now generally recognized and skepticism is rapidly disappearing owing to the wonderful results obtained and the gradual increase in the use of it. It is now considered a very valuable adjunct in treatment of malignancy. In some places it is used as a palliative or prophylactic agent,

while in others it is used as a preoperative procedure.

Several factors have contributed to put Radium into disrepute, chief of which are the cases which are absolutely hopeless. These have been sent for Radium treatment as a port of last resort. In these the doctor and patient have been made to believe by the Radiologist that the treament would give a permanent cure. As a result, when the patient dies the case is refered to as one treated by Radium without any benefit; while the marked improvement in the patient's general condition, his or her relief from the terrible suffering incident to the growth, and the prolonging of the patient's life are all minimized and no mention made of it.

In some cases the patient cannot receive palliation from any other form of treatment, or a cure is impossible but even in these cases, Gentlemen, I say that any measure which will make the patient more comfortable and enable him, or her as the case may be, to spend a few more months, or in some cases years, with their loved ones is a wonderful discovery; and the doctor who does not advise his patient that such an agent is available is not doing justice to his practice.

It is important that the Radiologist should not be over-optimistic in his prognosis for often a clinical cure is apparent and the case is discharged as such; later as a result of metastasis the patient will die and then the skeptics will point to this case as one treated by Radium. Cases which have had no recurrences will not be mentioned, so I believe that the safe procedure is to give a guarded prognosis. It will be soon enough to become the optimist later when time has had an opportunity to prove your convictions.

The use of Radium is in its infancy. More is being learned of its usefulness and limitations every year. Possibly the broadest field is in the perfection of our treatment of pathological conditions already placed in the category of Radiotherapy, than in the treatment of other maladies. At present there are some who advise and use it for every conceivable condition; as a result, of course cures are not always sequel, but eventually its position will be established and its limitations known. Just as old Ponce de Leon searched in vain for the Fountain of Youth, so some of the Medical fraternity are looking for a panacea for all diseases. Lack of results in some cases is due to under-treatment, bad results in other cases is due to over-treatment, of Radium. Just as under-treatment will stimulate the growth, so over-treatment will destroy everything, normal as well as pathological.

Radium does not do away with surgery, except in some conditions. In fact, it is surgery's most valuable ally; whether used before, at the time of the operation, or after, depending upon the conditions being dealt with. It will enable the surgeon to obtain results which otherwise would be impossible.

It is not my intention to take up in detail the various conditions which may be treated with Radium. I merely wish to call your attention briefly to some of the conditions so that when you go back to your respective practices and have occasion to advise your patients you will remember that Radium may accomplish results which a few years ago were considered, and rightly so, impossible.

The term "inoperable cancer" and Radium are used so constantly together that they are almost synonomous, and

in these cases it has its usefulness as a pallative agent but not as a cure, usually. First, allow me me to mention Cancer; location, kind and duration of course being taken into consideration.

Skin cancer, the type seen often in the aged which frequently begins as a Senile Keratosis responds to Radium, eespecially the Basal Cell type.

Cancer of the lip, springing from the skin surface is in the field of Radium if springing from the mucuous membranes then Radium and Surgery are the best means of combatting the conditions. Special attention being given to the cervical glands, regardless of the operative procedure.

Cancer of the breast, is best treated with Radium and Surgery, radiation preceding and following the operation. If inoperable, the Radium alone purely is used as a palliative agent.

Cancer of the prostrate may be treated by Radium alone either thru the cystoscope, perineum, rectum, urethra or thru the bladder by cystotomy. Some use the combined method, radiating thru the rectum and intervesicular, thereby securing a crossfire. If there is a slight involvement, then surgery followed by Radium seems to promise best results. While the present status of Radium in this condition is considered pallative, some of the recent reports would indicate a brighter future for the cases of prostatic carcinoma with possibly a cure.

Cancer of the uterus with the fundus involved, then Radium precedes and followss the operation. If the cervix alone, the Radium alone promises good results. If there is an involvement of the brod ligaments, the palliation with Radium is the best that can be promised. The type of cancer of course being taken into consideration. Squamous cell being very markedly more resistant than the Basal Cell type, in fact he former is two to four times more resistant than the latter.

Sarcoma. These respond to Radium, except the Melanotic type, which even with Radium very little can be promised.

The Lympho-sarcoma which before the use of Radium almost universally was a hopeless case, according to some recent reports by Bissill who gave out a series of cases in which there have been no recurrences, in 50% after a period of two years. Personally, I believe that if the case is operable, surgery should be used and Radium applied before, at the time of operation, and follwing.

Angiomas. This condition has responded so well to Radium as to almost remove it from the surgical field. The same may be said of Keloids. It is only with the advent of the X-ray and Radium that the treatment of Keloids has been satisfactory, previous to this the treatment was doubtful.

Fibroid of Uterus. If the enlargement is about the size of a three or four months' pregnancy, it should be treated by Radium provided it is not the pedunculated type. In fact, some have gone so far as to say the surgeon who operates on all fibroid cases is not a surgeon but an "operator." At the present time the conservative surgeon is sending some for Radium, others are treated by surgery, which to me seems the plausible course to pursue.

Chronic Leucorrhea. If there is no acute inflammatory condition it will respond in many cases to Radio-therapy when all other methods have failed. I will mention in this connection; Idiopathic uterine hemorrhages, ideal cases for the later condition are those over 40 years of age. In treating Leucorrhea,

or menorrhogic conditions in young women, precautions must be taken not to induce premature menopause.

Leukemia. This seems to be better controlled by Radium than by any other means. The Myelocytic Leukemia was first treated in 1910, application being made over the spleen. In a large percentage of cases the spleen returned to normal size, the leucocyte count fell and the anemia and general condition were definitely improved.

Brayton & Heublin in reporting a series of cases of enlarged Thymus say it is quicker than the X-ray, more efficient and usually one application is all that is necessary.

Leukoplacia, Lupus Erythematosus, Psoryiasis, Lupus Vulgaris, Tubercular Adenitis and Chronic Eczema all respond to about the same percentage as to the X-ray. Although a Leukoplakia probably shows better results obtained with Radium.

There are a number of other conditions which have been subjected to Radiation in some of which there have been favorable results. Possibly the only ones that interest you most are Ex-opthalmic goiter and Cataract. These, accordingly to some recent reports, are very encouraging.

Now a few words as to Dosage. This varies with the Radiologist. Some use a massive dose, others a smaller. However, the tendency seems to be at present more conservative and to use smaller doses than formerly. The things to be taken into considerataion are: 1st, conditions we are dealing with. If we are treating a lesion for cosmatic purpose alone it would require care and less dosage than if it is a case of malignancy and a question of life or death to the patient. Next: the kind of tissue we are treating; the location, the duration and amount of involvement, and general condition of patient. Also, whether we are attempting a cure or only palliation; it being important not to destroy the patient's natural immunity.

Just a word as to location. Some tissues are more susceptible than others. The uterus being more resisant; the bladder, urethera and rectum possibly the least. The eye is about the same resistance as the skin.

In conclusion, the value of Radiotherapy is malignancy has been established. The results obtained being governed by the condition at the time of radiation. As a curative agent, it has proved its efficiency; as a palliative, there is none that can compare with it. Formerly, with the hopeless inoperable carcinoma all that was done was to keep the patient under the influence of narcotis, usually morphine. Today, it should be Radium. Before, the patient was left in a helpless condition to suffer and die by inches. Now, they can be made more comfortable and often their lives prolonged. Advocates of Radium do not claim that it supersedes Surgery but that it makes more efficient and better surgery, that it helps prevent recurrences and renders cases which are inoperable operable. Patients are made more comfortable by its application, the growth is retarded and the proliferation of the cancer cell is inhibited and the patient's life prolonged. I believe that you will agree with me when I say that the patient is entitled to evry available means to restore him to health; that if Radium were used more often as an adjunct to Surgery that the number of recurrences would diminish.

THE TREATEMENT OF LEUKAEMIA WITH RADIUM — PRELIMINARY REPORT OF A CASE

Read Before the Mercer Co. Medical Society, Bluefield, Nov. 1920.

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Th use of radium as a therapeutic agent extending over a period of more than a decade has been productive of an amount of clinical data from which reasonably fair conclusions may be drawn. In cancer, by no means has it measured up to the enthusiasm and expectations of early workers, but in this first exploited field it has become at least the main adjunct of surgery, and in certain instances surgery has yielded to radium alone. Many cases of fibroids of the uterus yield readily to its rays, where formerly hysterectomy was performed, and the control of essential uterine hemorrhage is so certain that the remedy is admittedly a specific. Since its first application, in 1910, in the treatment of leukaemia, radium has not provoked relatively a great amount of enthusiasm. The epochal cases of Renon, Degrais and other French workers, however, and those which have since followed among radium workers everywhere have dmonstrated results which have certainly made radium the therapy of choice in a disease which has consistently defied measures of all kind. Surely no lasting cure of leukaemia can be claimed by radium, but the uniform and often startlingly prompt relief of symptoms would seem to place its application definitely in the forefront of palliative remedies in this disease.

The mechanism of the control of leukaemia by radium rays is not different from the mechanism of control in other conditions and is dependent upon the fact, alike true in x-ray and radium therapy, that the cells of an organism possess varying degrees of susceptibility to certain destructive substances. A varying degree of susceptibility exists in the tissues of the normal, and this fact alone no doubt accounts for results in certain conditions; but it is in those diseases whose pathology represents massive structures of cells of an embryo type that radium is most definitely a remedy. The riotus growth of cancer, with its consequent production of cells of this type, is the most pertinent evidence, where the destructive effects of radium rays is a generally recognized fact. The mechanism is the same in leukaemia. Due to some erratic effort on the part of the organism, enormous numbers of immature cells appear in the blood stream and as an intregral part of massive lymph structures and constitute a strikingly similar condition of susceptibility.

The remissions in the course of this disease when radium is applied to an enlarged spleen belong in reality to the spctacular things in medicine.

The myelocytic type constitutes nearly all of the cases of leukaemia which come for treatment, and the usuaal technic employed consists of surface applications to the enlarged spleen. Rarely an early case of chronic lympathic leukaemia is encountered, when applications are made to such superficial or deep glands which give evidence of the disease. The method of the French is the method generally in vogue and was described in some detail by Ordway in 1917. The outline of the spleen is determined by percussion and palpation and the area is marked out

with pencil or grease paint. Series of small squares having dimensions of 3 cm., are marked over the area of enlargement, the resulting arrangement having a checker-board appearence and containing a varying number of squares, from a few to 30 or 40, depending upon the size of the spleen. The squares thus marked out are numbered serially and radiated successively until the whole area of the spleen is gone over. The radium screened with .5 mm. of silver, 1 mm. of brass and 2 mm. of para rubber and mounted on blocks of wood 2 cm. in thickness which are held in place by adhesive straps and readily moved from one square to another seems a simple and adequate technic under ordinary circumstances. The principle of deep therapy is thus made use of, and the desired diffusion of rays is approximated at least. The further benefit of cross fire is obtained by having the amount of radium divided and put in two applicators and placed on widely separated square at different angles. In our own practice we have used two applicators, each containing 25 mg. of radium element, and have found an exposure of 8 hours to each square to be adequate to produce desired resultts. In this way the total dose of a single radiation of a spleen will average from 2000 to 5000 milligram hours. Thee radiation of superficial glands or glands of the mediastinum, with modifications to suit different conditions of depth, in principle is the same.

Few things in medicine furnish more uniform results than the results reported by radium workers in treating leukaemia. Peabody, reviewing some of the work of the Cancer Commission of Harvard University, reported, iin 1917, 36 cases of myelocytic leukaemia coming under observation over a period of five years. Giffin, of the Mayo Clinic, reported 30 cases in the same year. Almost without exception, definite remissions in the disease have been obtained in these cases, and the most remarkable, improvement has occurred with striking changes in the size of the spleen, the blood picture, and the general condition of the patient. The spleens when first seen varied in size from moderate enlargement to enormous dimensions filling almost the entire abdomen and extending into the pelvis and to the right of the median line. In many of these cases, often in the course of a few weeks, the splenic enlargement disappeared and the spleen was not palpable below the costal margin. A decided reduction in size occurred in practically all the cases. Most marked changes were noted in the blood picture. The decrease in the leucocytosis may be observed in from 24 to 72 hours and is often rapid and continuous for days or even for several weeks. A count of 100,000 or 200,000 may drop to normal in the course of a month. One case iin Giffin's series reduced from 918,000 to 19,600. The myelocytes are the first cells to disappear, when the percentage of normal polynuclears is proportionately increased. Some myelocytes persist in spite of repeated radiations. With the decrease in leucocytes there is a rise in hemoglobin, and the red cells, often very low, may increase to a number approximating normal. The improvement in the general condition is constant almost without exception, and in some instances the change is not short of remarkable. Patients in a distressing and apparently serious condition have returned to their work restored temporarily to a normal and efficient existance. In the few cases

of lympathic leukaemia which have been reported in the same general improve ment has been noted. The enlarged superficial glands disappear and there is a similar reduction in the total count of white cells, although the percentage of lymphocytes remains abnormally high.

It is disappointing that a result which at first hand seems so spectacular should prove of temporary benefit only. In real leukaemia the improvement amounts to but only a remission of symptoms, and so far, an isolated case to the contrary, radium produces no permanent cures. A recurrence is invariably looked for sooner or later. One of Peabody's cases remained well from February to November without a second radiation, but nineteen of the same aurhor's cases had died when he reported his series A remarkable case has come to our notice through the courtesy of Dr. H. B. Frazier, of Graham, Va. A man, aged 46, whose health had been failing for one year and who had a well developed case of myelocytic leukaemia, was referred by Dr. Frazier to the John Hopkins Hospital for treatment in September of 1910 His white cells were 240,000 and his red cells were only 2,000,000; he had an enormous spleen and was practically past going. One radiation was followed by prompt improvement, with an early return to his usual work, and thirteen months later his leucocytes were 11,000, his red cells over 5,000,000, and his spleen was not palpable below the costal margin. This failure of recurrence is certainly the exception. Generally it has been necessary to repeat radiation in from on to three months. The effectiveness of the rays is lost after a varying number of exposures, and the patient does not respond, or a decided leucopania supervenes and death occurs. Taking advantage of the improved physical condition, it was the practice for some time at the Mayo Clinic to splenectomize these cases after the splen had been rduced to normal or approximately so by radium. They succeeded in reducing the mortality of an operation from a hitherto prohibitive death rate to one of comparative safety, but their statistics do not tend to prove that anything was added to the length of life of these cases of leukaemia.

The case of lympathic leukaemia, a preliminary report, in which we give some details, illustrates well the problems of raidation in both the lmphatic and myelocytic types.

Case No. 10872. A pale anaemic woman, age 60, entered the Bluefield Sanitarium July 9, 1920, complaining of swelling and tightness in her abdomen and general weakness. She was familiar with the disease from which she suffered, had had radium treatment previously, and came to us because our supply was nearer and more convenient.

There is nothing of significance in this patient's family history and little in her past history. Up to 7 years ago, except for much sore throat for which she claims her tonsils were cauterized many times, her health was exceptionally good. She menstruated at 14, her periods were never regular, and there was a final cessation of flow at 32. She has been married three times and has no children.

The symptoms which culminated in the present condition had their onset about seven years ago. The early glandular enlargement about the neck was associated with the occurrence of acute colds and gave no particular apprehension except that the glands did not return to normal when the colds subsided. After two years a probable source of

infection was looked for in the throat, but it is doubtful if a source existed. The question of the glands being tubercular came up, and the patient spent a year in the West without apparent improvement. Some splenic enlargement was noted when she returned. The glandular enlargement progressed, and in the fall of 1918 the chains of lympathic glands on both sides of her neck formed nodules the size of hen's eggs. The axillary glands were larger. About the same time she felt some tightness in her chest and complained of dyspnoea and palpitation. Consulting a doctor in Norfolk, Va., her condition was recognized as leukaemia, and the first radium was applied in December of that year (1918). Subsequently applications were made in March and September of 1919. These applications were made over the superficial glands, over the mediastinum, and over the enlarged spleen. A letter from the patient's doctor states that the leucocytes were reduced from 37,00 to 11,000 ofter one radiation. Improvement was decided and prompt after each treatment, and her condition was very good from her last raying in September (1919) until about Christmas of that year. Since early in January enlargement of her abdomen steadily increased, until at the time of her entrance to hospital in July it was enormous and caused an annoying sensation of tightness. The weakness at this time precluded activity of any kind.

The general condition of this patient when we first saw her was distinctly bad. She was pale and anaemic, and every movement suggested the weakness from which she was suffering. There was enormous enlargement of her abdomen, the spleen filling the left half and extending downward into pelvis considerably below the crest of the ilium. The cervical and axillary glands were palpable as small hard nodules. Relative high dulness existed over the base of the left chest and the apex of the heart was just behind the nipple. An x-ray plate made of her chest showed some slight density in the mediastinum. Several scars, the size of a half-dollar and the results of radium burns, were present over the area of her spleen and mediatinum. The blood picture was that of the lympathic type of leukaemia, the total white count being 224,000, of which 72% were small lymphocytes, 1% polynuclears and 27% basket cells (a type of degenerated cell having the shape and size of polynuclear but without a nuclear outline). The hemoglobin was 60% and the red cellls 3,720,000.

As soon as the necessary statistical data were obtained radiation of the spleen was begun according to the plan already outlined. Two 25-mg. tubes of radium element were used, and the time consumed in radiating the entire surface of the spleen was 80 hours. The patient experienced no unusual symptoms except a slight amount of nausea. 24 hours after radiation was stopped the leucocytes had dropped to 127,000, and there was already a perceptible reduction in the size of the spleen.

The subsequent course of this case, even in the face of published reports, was surprising to us who had not seen actual resultts. The general improvement has certainly been remarkable. In a very short time the patient resumed the regular duties of her household, the tightness in her abdomen was no longer complained of, and she considers that she feels quite normal. During her second visit to the hospital she spent most of her time in town shopping. In

two weeks ofter radiation her leucocytes were 18,250 and in one month 15,440, when her red cells were 4,520,000 and hemoglobin 70%. When the white cells were lowest the lymphocytes still remained proportionately high (84%). Normal polynuclears went up to 10%, and the basket cells disappeared entirely at one size of only moderate enlargement, being count. The spleen has reduced to a felt about two inches below the costal margin. On September 24 the white cells were 35,400, with the proportion of basket cells amounting to 63%; the hemoblobin was 60% and there was a drop in the red cells to 3,600,000. The patient's general condition was still exceptionably good, and the spleen was moderately small, but in view of the change in the blood picture, we considered that another radiation was called for, and application was therefore made for 40 hours with the same quantity of radium which was used before. The white cells on Nov. 3 were around 10,000, the hemoblobin 70%, and the red cells over five million.

In reviewing the results of radium treatment of leukaemia, the fact must not be overlooked that other measures have been used with stricking success. Indeed, in a few rare instances, remissions in the disease have occurred independent of any applied therapy. It cannot be denied that benzol has been an effective remedy and has produced results in something like 70% or 80% of cases. Certain potential toxic effects of this drug would militate against its general use if a simpler and safer remedy is at hand. From 50% to 80% of patients do not respond satisfactorily to x-rays, but this high percentage of refractory cases may not be due so much to the ineffectiveness of x-rays as to the faulty technic. The improvement which nesessarily must come in x-ray therapy, supplemented by a standardization of technic and dosage, makes fruitful speculation at least that ultimately there may be but little difference in the therapeutic values of x-rays and radio-active substances. For the present the use of radium alone seems the simplest and most effecttive means of accomplishing the best resultts in the treatment of this consistently refractory disease.

Announcements and Communications

On May 4th the semi-annual examination was held by the State Board of Examiners for Registered Nurses. On the same day, and at the same hour, with the same set of questions the test was given in the four cities of Wheeling, Charleston, Keyser and Bluefield and under the supervision of a member of the board.

It is manifestly evident that some of the hospitals of the state conducting training schools for nurses are not adequately instructing their pupils.

While there has been noted by the Board, a marked improvement, they wish to urge all of the hospitals to conduct better class room work, a higher quality of didactic and clinical teaching. More frequent lectures, especially in the fundamentals. The lamentable ignorance of some of the applicants in the basic principle sof their art, would bring a blush to the cheeks of those who are pretending to conduct schools for these trusting women, if the names of the hospitals were published with the answers to the questions exhibited.

Again the Board wishes to emphasize the fact, that it is not the fault of these

applicants, but the glaring fault and sin of those who receive some of these girls to training when, they are not only wanting in the simple rudiments of a public school training, but who have received little or no instruction in primary anatomy, materia medica or the practice of nursing.

The following were the questions given at the recent examination.

1. Give the general preparation of an operating room in a country house?

2. What is otitis media, how recognized, why dangerous; name two diseases it may follow in childhood?

3. Name two complications following removal of tonsils and adenoids. If a patient vomited blood following operation, what would you suspect, what would you do?

4. What is meant by immunity? Give principle method of immunization?

5. How would you feed a typhoid? Give symptoms of perforation in typhoid?

6. How would you overcome constipation in a child?

7. Define proctoclysis. What do you expect to accomplish by this procedure?

8. What is puerperal septicaemia? Name at least four diseases every nurse should avoid prior to an obstetrical engagement?

9. What signs would lead you to suspect a distended bladder in a seriouly ill woman? How long would you let a patient go after an operation without voiding urine before reporting it?

10 Define ectopic gestation?
What symptoms would lead you to suspect a ruptured tubal pregnancy? What is the duty of nurse in concealed bleeding?

11. How much tincture of opium would you give an infant one week old? Indications for its use in infancy?

12. What do you understand by certified milk?
What is the cause of high infant mortality in the summer months?

13. IN what disease might you find tarry stools; bloody urine; intestinal hemorrhage; bloody sputum; pus in the urine; nose bleed?

14. Name two diseases requiring strict quarantine, essentials for making quarantine successful?

15. Name the contents of the Thoracic and the Abdominal Cavities?
What divides the Abdominal Cavity from the Thoracic Cavity?

16. Name the nerves of smell?
What is the Retina?

17. Whaat is the difference between the Peritoneum and the Perineum?

18. What is the digestion; absorption; circulation; assimilation?
Name all the ductless glands you can.

20. How many bones in the hand?
What is the difference between the Spinal Column and the Spinal Cord?

21. What class of drugs reduce fever and what are the bad effect of some of these drugs?
What is ordinarily the safest way to reduce abnormally high temperatures? Give doses of following drugs: Acetanilid; Choral Hydrate; Atropine Sulphate; Tinct. Aconite Root; Tinct. Opium Camphorated; Paregoric; Apomorphine; Tinct. Digitalis?

22. What is Grave's disease? Mention Three important symptoms?

23. Give symptoms in case of acute Articular Rheumatism in a child?
What is the most common serious complication?

24. What should a nurse do for a child during a convulsive seizure in the absence of a physician?

25. What do you understand by

ethics of nursing?

If a patient or relative of a patient wanted to change physicians during an illness, what should be the attitude of the nurse?

26. How would you differentiate between Fainting, Convulsion, and Hysteria?

27. What would you do in a post-partem hemorrhage pending arrival of physician?

28. If an abcess followed a hypodermic injectiion, what would it indicate? How would you avoid it?

29. How would you prepare a tray for the anaesthetist—name articles needed?

30. Difference between Cathartic and Laxative; give two examples of each?

Fort Worth, Texas, April. 22 1921

Dr. Jas. R. Bloss, Editor,
The West Virginia Medical Journal,
Huntington, W. Va.

Dear Doctor:

It is now a little, but Iwant to thank you now for the additional copy of your Journal, to replace the one I mutilated in having the "Dr. Palmer" article set up for our Journal. In your favor of February 24th, you stated that you had no more of this particular number but would send in one as soon as you could get it, and I presume you sent it. I do not recall acknowledging receipt of this favor before.

For your information, I not only published the article in question in the Journal but had it run off in reprint form and sent to each county society and to each legislator. We were not successful in our efforts to secure an injunction feature for our Medical Practice Act, but we succeeded in whipping out the chiropractors and optometrists with hands down. It would have become a law and very effectually put a crimp in this gentry had it not been for the lack of time. The fight on our measure was most energetic and vicious but we had a clear majority in favor of the measure in both branches of the legislature. The only tight squeeze was in the matter of Christian Science exemption, on which there was a tie vote in the Senate, the chair voting in our favor. We do not stand for any exception whatsoever in Texas. We are going to have the medical profession attend to this little matter of the practice of medicine in this State if it is possible to do so. If anybody else wants to practice medicine, they must do so outside the pale. Then it is a matter of let the purchaser beware.

Fraternally yours,
Holman Teylor,
Secretary.

THE DELAY IN THE JOURNAL

At last the trouble and delay in the publication of our Journal seems to be ironed out. This months issue, like that for May is more than a month late. The July issue too will be a few days late but we hope by August to be back on schedule again.

Will you please be patient with us under trying circumstances over which we have no control.

At the same time please send some state news. Surely a number of the physicians have been taking vacations and the rest of us would like to know of it. During the summer the securing of news items is very difficult and the County Society reports usually lag as there are few meetings held.

The West Virginia Medical Journal

JAS. R. BLOSS, M. D., Editor
C. R. ENSLOW, M. D.
J. E. RADER, M. D. Assistant Editors

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All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notices of deaths, removals from the state, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great for the editor and printer.

ADVERTISEMENTS

Advertising forms will go to press not later than the 10th of each month.

All advertisements must conform to the standard established by the Council of Pharmacy and Chemistry of the A. M. A.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chairman of Publication Committee, Huntington, W. Va.

Editorial Office: 804 Lincoln Place, Huntington, W. Va.

The Committee on Publication is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author or communicant shall be held entirely responsible.

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DELEGATE TO A. M. A. 1921-22—Jas. R. Bloss, Huntington; Alternate, W. W. Golden, Elkins.

COUNCIL

FIRST DISTRICT—C. G. Morgan, Moundsville, one-year term; H. P. Linz, Wheeling, two-year term.
SECOND DISTRICT—J. C. Irons, Dartmoor, one-year term; C. H. Maxwell, Morgantown, two-year term.
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FIFTH DISTRICT—J. E. McDonald, Logan, one-year term; E. H. Thompson, Bluefield, two-year term.
SIXTH DISTRICT—R. H. Dunn, Charleston, one-year term; J. W. Moore, Charleston, two-year term.

THE ANNUAL MEETING IN CHARLESTON

It is to be regretted that every member of the Association could not have been in attendance last month, during the session held in our Capitol City. The program as arranged gave every promise of an especially interesting meeting from a scientific standpoint and the fact that the Kanawha County Society was to be our host guaranteed a pleasant time from a social angle.

There was so much of interest and value in the way of papers and addresses that it was to be regretted that one could not be in both sections at the same time. No matter how much one was getting out of the section he attended, there was something equally as valuable to be hard in the other. Of course we will have an opportunity to read these papers—in the Journal, but unforunately the discussions will be lost. It must be arranged some way that in the future, stenographic reports of these may be available.

The social features of the meeting as provided by our hosts, were particularly enjoyable and all that could be desired. One thing in particular was the regular weekly noon luncheon of the Kanawha Medical Society. The members were

asked to attend as guests on Thursday, which is the day of their regular meeting. This custom of theirs is productive of a much closer fellowship among the members than is usual in County Societies and impressed all of those who attended as a feature it would be well for all our local societies to adopt. The banquet on Wednesday night certainly measured up to ones fondest expectations in all respects. During the course of this the President, J. Howard Anderson of Marytown, was presented with a medal by Secy. Ashworth, as a token of esteem from the members of the Council and the Secretary.

We came away from the Banks of the Kanawha feeling very glad indeed that we had gone and knowing that our friends in Charleston were glad to have had us.

Next year under President Geo. A. MacQueen of Charleston you will meet with the Cabell County Society in Huntington. Just as one friend to another we will say that we will "try" to equal this years' sessions in entertaining you.

RADIUM

Perhaps the recent visit of Madame Curie to America has something to do with the discussions, both lay and scientific, of this addition to the arruamentarium of therapeutitists. When we read some of the articles concerning it and the newspaper interviews given by physicians who have purchased certain amounts of it, some of whom are members of the medical association, we feel that a careful study of the life of this simple, unassuming but most wonderful woman would be of incalculable benefit to the sick.

In this issue of the Journal appear a number of papers dealing with Radium and its use. Acareful reading of these will certainly give us an idea of what can be done and what cannot, in the present state of our knowledge concerning it, by the application of this very remarkable therapeutic agent.

There is one field which is not touched in these papers specifically, in which there is seemingly much to be accomplished, namely in the treatment of malignant tumors of the nose and throat.

Certainly it is to be hoped that the physicians who are bringing the possibility of Radium treatment to sick persons of moderate means shall try to learn of the limitations of its use as well as the great benefits to be gained when rightly applied.

Probably the gift of the gram of Radium and half gram of mesothorium to Mme. Curie by the women of America will do more than is realized, to make it possible for her to clear up many doubtful points and aid in perfecting the use of radiation with these agents in Carcinoma and Sarcoma.

THE TRAINING SCHOOLS

From time to time we have made comment upon this question. It is earnestly urged that all of us read the criticism of the present methods and the lack of real training given to pupil nurses, which appears under announcements and communications. These criticisms are just and if young ladies give three years to perfect themselves in this profession they are certainly entitled to far better training than has been given in the past. There must be something wrong in the system some place.

Not being in any way familiar with the management of hospitals or the planing of courses of training the Editor does not feel competent to criticise. Still

there is something wrong and we do feel that those who are familiar with the needs of the situation should in time involve some standard for training schools for nursing.

The West Virginia Hospital Association has had this question under discus sion for some two or three years, just what has been accomplished so far we cannot say, as no papers have been available since the Clarksburg meeting.

State News

Dr. Frank LeMoyne Hupp of Wheelingis spending his vacation at his summer home at Lake George, New York. He will return to West Virginia in September.

Dr. R. E. Davis, formerly located at Junior is now at Parkersburg.

Dr. W. H. Howell has moved from Parkersburg to Spencer.

Dr. S. F. Yoho, located at Moundsville has moved to Captina.

Dr. W. E. Vest of Huntington was a recent visitor to Richmond, Virginia.

Dr. A. P. Butt of Elkins attended the finals at Charlottesville at the University of Virginia in June.

Dr. W. T. Henshaw of Martinsburg has been appointed State Health Commissioner by Governor Morgan.

Dr. Joseph F. Fox of Martinsburg died May 5 from the effects of poison, self-administered while suffering from carcinoma of the throat. He was 56 years old.

Dr. Seals Harris, Birmingham, Alabama has been appointed heaad of the General Gorgas Memorial Commission by President Denny, University of Alabama.

Dr. Benjamin J. Read and Miss Chloe Dymple Spriegel both of Red Jacket, W. Va. were married June 8.

Dr. Johnson McKee Sites of Martinsburg died May 23 after a long illness. He was at one time president of the Eastern Panhandle Medical Society of which he was elected an honorary member for life.

Dr. Maxfield Barber, son of the late Dr. T. L. Barber, who was so well known by the older men of the profession, is visiting his mother in Charleston. Dr. Barber is now doing research work at the Bristol City Hospital and expects to spend two more years in Boston before location at home. Dr. Barber won a Distinguished Service Cross while overseas and after the Armistice served 17 months in Poland with the Red Cross.

Captain Brooke Dodson of the Medical Department of the Army is visiting his sister in Charleston. Captain Dodson is now stationed at Niagara Falls.

New forms and regulations made necessary in commitements to hospitals for the insane by the recent legislature were the subject of an important conference between the members of the state board of control and the superintendents of the insane hospitals at Charleston, recently.

The conference, held at the board of control's offices, continued through the entire day. In addition to Messrs. Lakin, Barnes andDarst,members of the board, Dr. L. V. Guthrie, superintendent of the Huntington State Hospital Dr. S. R. Holroyd, of the Spencer insane hospital, and Dr. C. E. White, superintendent of the institution at Weston, attended the meetng.

American Psychiatric Association.—At the seventy-seventh annal meeting of the American Medico-Psychological Association held, May 31, to June 3, in Boston, a new constitution was adopted

providing among other slight changes a change in the name of the organization which will hereafter be known as the American Psychiatric Association. The publication of the *American Journal of Insanity*, Johns Hopkins Press, Baltimore, will hereafter be the official organ of the association and will be published under a new name, the *American Journal of Psychitry*, while the former transactions bound in book form will be omitted. The newly elected officers are: president, Dr. Albert M. Barrett, Ann Arbor Mich.; vice president, Dr. Harry W. Mitchell, Warren, Pa., and Dr. Clarence Floyd Haviland, Middletown, Conn., secretary-treasurer.

Dr. L. V. Guthrie, Superintendent of the Huntington State Hospital, Huntington was elected Auditor and a member of the council at the meeting of the American Psychiatric Association held in Boston May 31 to June 3.

Twenty-two nurses graduated from the School of Nursing of the new Huntington General Hospital and Kessler-Hatfield this month. The principle address was made by Dr. Hatfield, and Dr. J. E. Rader, president of the Greater Huntington Hospital Association ,presented the diplomas to the graduates.

Dr. Andrew J. Beardsley, pioneer physician of West Virginia died June 25 at the home of his daughter, Mrs. Elliott Northcott on the Ohio river road near Huntington. Dr. Beardsley was 78 years old.

He was born in Gallia county, Ohio. At the outbreak of the Civil war, when he was 18 years old, Dr. Beardsley enlisted in the Union army. He was a member of Conpany 6, of the 195th Ohio Infantry. He was a sergeant in the company. He was a member of the Huntington Post G. A. R.

After the war was over,Dr. Beardsley taught school for a few years, and then went to medical college. Following his graduation, he located at Barboursville. He later came to Huntington to practice medicine.

Dr. T. W. Moore of Huntington attended the meeting of the Laryngological Association held at Atlantic City, June 3 and 4.

Dr. Samuel R. Holroyd, Superintendent of the State Hospital at Spencer attended the meeting of the American Psychiatric Association, held in Boston May 31 to June 3.

Dr. and Mrs. C. J. Broeman of Cincinnati attended the meeting of the State Association in Charleston.

Society Proceedings

Fairmont, W. Va.
May 6, 1921.

Dr. Jas. R. Bloss,
Huntington, W. Va.

My Dear Dr. Bloss:

Your postal card received today, and I appreciate how you feel about news from Marion County, but its not my fault, if we did anything at our meetings I would gladly send the news to you, but some of our meeting are a joke.

Meeting in March we had Dr. Miller from Johns Hopkins read a paper to us on "The Value and Interpretation of laboratory work in Diagnosis." Nothing more was done at that meeting. Our meeting of April lasted one hour, took in two members and adjourned.

Our Motto is to secure a doctor to read a paper at each meeting and try to work our society up, but I have come to the conclusion many belong to our society for sake of protection.

I shall send the results of all our meet-

ings from now on, and you can take out what you think of interest.

Fraternally
J. B. Clinton.

Princeton, West Virginia,
April 28, 1921.

The Mercer County Medical Society met in the courthouse at 8:30 p. m. and was called to order by the Vice-President, Dr. Hays.

The minutes of the previous meeting were read by the secretary and approved.

Under clinical cases Dr. B. W. Bird made a report of the Health Officers' meeting, at Charleston, and said that one of the most important steps in fumigation was to thoroughly clean, scrub and paint the rooms.

A resolution was adopted at this meeting asking tht steps be taken to compel all students in the state schools to be vaccinated against smallpox. Dr. J. R. Vermillion made a report of this same meeting and said that the officials at this meeting decided that guards were no good in taking care of infected smallpox

Dr. C. C. Peters reported some very interesting data that he had picked up at the Venereal Clinic, and he also said that the point they made at the Health Officers' Conference was that fumigation nowadays is not any good.

Dr. W. H. Wallingford reported a few important points he picked up at the Venereal Clinic. Syphilis and gonorrhea were discussed at some length by each doctor present.

Dr. J. L. Bailiff asked to have the reaction of neosalversan on the kidneys explained to him when it showed signs of nephritis after the administering of this drug for syphilis in doses of from .4 to .6 grams. Dr. Kirk explained this very clearly, having had some experience at the Bellevue Hospital a few months during the war.

Dr. C. C. Peters reported a case of a child a few days old having passed large quanities of hematuria. Some of the doctors present recommended the administration of blood serum from horses or human.

Dr. Gautier reported a case where a mother has had seven or eight miscarriages, without a syphilitic history, and still her grandmother had eleven or twelve healthy children to his knowledge. The doctor was asked to have a Wassarman test.

Dr. Steele reported a case where a woman had had apparently a healthy child about nine years ago, but still she has had seven miscarriages since that time. She usually miscarried at three months, but having had a Wassarman made of her showing positive and keeping her on treatment, he was able to carry her over to the seventh month and then this miscarriage was brought on from exertion.

Under papers Dr. Kirk gave us a very complete history from begining of the symptoms of cancer of the skin to the now known different treatments for same. He warned us to watch out for little irritations about warts, corns, moles, and such like, along with inflammation of the gall bladder and kidneys, due to stone, which are very often the forerunners of cancer in some shape or form, and possibly in a different part of the body. He recommends that all neoplasms, warts, moles, et cetra should be removed early; also that lacerations of the cervix should be repaired early to prevent the formation of cancer somecancer being treated with cautery, X-ray, radium, and removed with the knife.

The following bills were allowed:

Bluefield Daily Telegraph, March 21st, $8.00; April 25th, $6.00.

The following applications for membership were read:

Dr. W. W. Rixey, second reading.

Dr. H. C. Warlick, third reading.

Dr. Charles E. Easley, first reading.

None of the members of the Board of Censors were present, and Dr. Hays appointed the following on the temporary board: Drs. J. R. Vermillion, Ira Smith and B. W. Bird. Dr. Rixey's application being acted on favorably by the board of censors, he was then elected as a member of this society.

Programme for the July meeting:

Dr. J. O. Bailiff

Dr. Ira Smith,

Dr. R. O. Rogers,

Dr. B. W. Steele.

Adjourned at 10:15 p. m.

H. G. Steele,
Secretary.

EXCERPTS FROM MINUTES OF MONONGALIA COUNTY MEDICAL SOCIETY.

Dr. Wylie presented a case of a baby 11 months old which he had operated on for occlusion of Posterior nares. It seemed that a membrane had grown across the nares, through which he cut an opening and the child could immediately breathe through his nose.

Dr. Wylie also presented a case of ptosis of th upper lid, and partial immobility of the ball. When the doctor had opened up the adjacent sinuses, and drainage established the ocular paralysis immediately began to improve, and the ptosis gradually followed suit. The case was an interesting one, and was freely discussed by those acquainted with the anatomy and physiology of these parts, but the secretary wisely refrained from taking part in the discussion.

Dr. Gibbons reported a case of diptheria in whic ha large area of the face became gangrenous. The child died.

Dr. Brown reported a case of death of a woman shortly after she was delivered of her twelfth chiild. She had no doctor or midwife, but performed their duties herself. Immediately after she had washed and dressed the baby, she became deathly sick, accompanied by an intense pain just below the costal margin left of the Median line. The patient was dead before the doctor arrived. The cause of death was not determined.

Dr. Gibbons reported a case of apparent gallstone colic, renal colic, colic, appendicitis, acute indigestion and various other acute diseases. He decided to cut him open and take a look on the inside, and when he did so, he found the whole outfit of his diagnoses were correct. For appendix was curled up around the gall bladder, crossed over to the kidney, glueing all intervening tissues together and stuck its tip end on top of the kidney and grew fast. It was the most elongated, contorted, vermicular appendix that Dr. Gibbons had ever seen. The Doctor was wonderfully tickled to prove that all his manifold diagnoses had been true in spirit and in fact.

The Monongolia County Medical society is in fine fettle, and has the largest membership in its history. Most of the members take an active part in the meetings. A few are too busy to attend, but they stay at home, and pile up a few more dimes before the advent of hard times.

C. H. Maxwell.

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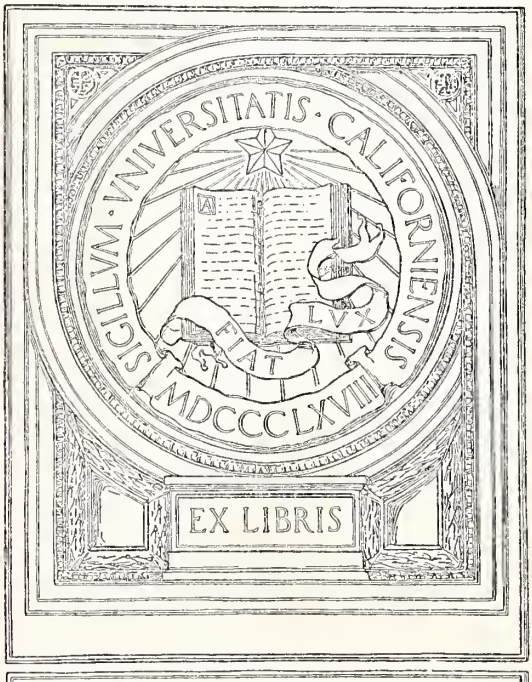

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